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1938.

HERTFORDSHIRE COUNTY COUNCIL.

THIRTY-NINTH ANNUAL REPORT ON THE

PUBLIC HEALTH

OF

HERTFORDSHIRE

BEING THAT FOR THE YEAR

1937

BY

H. HYSLOP THOMSON

M.D., D.P.H.

County Medical Officer of Health.

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**To the Chairman and Members of
the Public Health and Housing Committee.**

LADIES AND GENTLEMEN,

I have the honour of presenting to you the Annual Report on the Public Health of the County for the year 1937, being the thirty-ninth you have received.

The health of the County during 1937 has been generally good except for a sharp outbreak of influenza early in the year.

The statistics for the year 1937 are to be regarded as satisfactory although in some respects they are not quite as good as in 1936. There is a further rise in the birth-rate, a fall in the death rate from both forms of tuberculosis and from epidemic disease while the infant mortality remains unchanged.

On the other hand there is a slight rise in the general death rate, in the maternal mortality and in the death rate from malignant disease.

I am, Ladies and Gentlemen,

Your obedient servant,

H. HYSLOP THOMSON,

County Medical Officer of Health.

HERTFORD.

June, 1938.

Members of the Public Health and Housing Committee.

Chairman : H. E. Fern.

Anderson, H.	Halsey, C. H.
Barratt, S. G. R.	Horwood, H.
*Bradford, Miss E. E. R.	Kelly, N. E.
Bridger, H. J.	Lindgren, G. S.
Brown, J. W.	Lucas, Major-Gen. C. H. Tindall,
Cannon, H.	C.B., C.M.G., D.S.O.
Clark, T. R.	Millard, F. A.
Craufurd, Col. R. Q., D.S.O.	Ordish, G. H.
Dimmock, J.	Pettengell, L.
Dutch, F. V.	Ritchie, W. G.
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Goddard, S. J.	Walker, G. Rollo.
Griffin, C. E.	Wheelwright, Mrs. A. E.
Guest, E. A.	

Those marked * are members of the Sub-Committee as to County Medical Officer of Health's Reports

District Medical Officers of Health.

<i>Name and Address.</i>	<i>District.</i>
Cox, Dr. W. J., Public Health Department, Watford.	Borough of Watford.
Fraser, Dr. H., Westlands, Harpenden.	Harpenden Urban.
Gross, Dr. M., Town Hall, Hemel Hempstead.	Borough of Hemel Hempstead Berkhamsted, and Tring, Urban ; Berkhamsted and Hemel Hempstead Rural.
Grosvenor, Dr. A. A., Bowling Green, Stevenage.	Stevenage Urban.
Hardie, Dr. C. F., Wood Street, Barnet.	Barnet Urban and Rural.
Harvey, Dr. W., 25 King Street, Watford.	Bushey, Chorleywood, and Rick- mansworth Urban ; Watford Rural.
Macfadyen, Dr. N., 123 Norton Way, Letchworth.	Hitchin and Royston Urban ; Hitchin Rural.
McClymont, Dr. J., Clay Hill, Enfield.	Cheshunt Urban.
Paton, Dr. R. R. K., 36 St. Peter's Street, St. Albans.	City of St. Alban ; St. Albans Rural.
Rose, Dr. A. E., Council Offices, New Barnet.	East Barnet Urban.
Suggit, Dr. B., Hitchin Street, Baldock.	Baldock and Letchworth Urban.
Thomas, Dr. A. T., Council Offices, Hatfield.	Welwyn Garden City Urban ; Hatfield and Welwyn Rural.
Whitelaw, Dr. A. D., The Castle, Hertford.	Borough of Hertford ; Bishop's Stortford, Hoddesdon, Sawbridge- worth, and Ware Urban ; Braugh- ing, Hertford, and Ware Rural.

THE HEALTH OF THE COUNTY, 1937.

TABLE I.
STATISTICAL SUMMARY.

(For each District see Table 17.)

	URBAN.			RURAL.			COUNTY.		
	1937. <i>a</i>	1936. <i>b</i>	10 years † <i>c</i>	1937. <i>d</i>	1936. <i>e</i>	10 years † <i>f</i>	1937. <i>g</i>	1936. <i>h</i>	10 years † <i>i</i>
I. Population	350,400	339,300	246,245	124,300	120,850	111,265	474,700	460,150	358,150
II. Birth-rate ...	14·9	14·6	16·1	13·8	14·1	14·8	14·6	14·4	15·9
III. Death-rate	10·1	10·0	10·4	10·2	10·0	10·3	10·1	10·0	10·4
IV. Infant Mor- tality *	38	40	46	36	30	45	37	37	47
V. Epidemic Death-rate	·05	·10	—	·08	·09	—	·06	·10	—
VI. Phthisis Death-rate	·39	·45	·6	·32	·33	·5	·38	·42	·5
VII. Cancer Death-rate	1·5	1·4	1·4	1·5	1·4	1·3	1·5	1·4	1·3

†1921-1930.

* Per 1,000 Births.

In the above table is given a summary of the vital statistics for the County during 1937. The estimated population for the year was 474,700, compared with 460,150 for last year. A study of the table shows a slight increase in the general death-rate, namely 10·1, compared with 10·0, an increase in the birth-rate which is 14·6, compared with 14·4 for the previous year, while the infant mortality, which is 37, remains unchanged.

There is a slight increase in the maternal mortality, which is 2·4 compared with 2·1 last year. There is a distinct fall in the death-rate from pulmonary tuberculosis, namely 0·38 compared with 0·42 for 1936. This is the first time that the death-rate from this disease has been below 0·4 in 1,000. The death-rate from non-pulmonary tuberculosis is also lower, namely 0·07 compared with 0·10 last year. There is a further fall in the epidemic death-rate, which is 0·06, compared with 0·10 for the previous year. The death-rate from malignant disease is slightly higher, being 1·5 compared with 1·4.

TABLE 2.
POPULATION AND ACREAGE.

(For each District see Table 17.)

	Acreage (land and water).	POPULATION.			
		Census 1911.	Census 1921.	Census 1931.	Estimate 1937.
Urban Districts ...	70,048	211,183	230,696	280,977	350,400
Rural Districts ...	334,472	100,101	102,499	120,229	124,300
County ...	404,520	311,284	333,195	401,206	474,700
England & Wales ...	37,339,215	36,070,492	37,885,242	39,947,931	—

The 1931 census population for the county was 401,206, the population estimated for 1936 was 460,150, and the estimated population for 1937 was 474,700, which is an increase of 14,550, compared with 18,450 last year. The increase in the urban districts was 11,100 and in the rural districts 3,450.

The urban districts in which increase in population has been most marked are Barnet, East Barnet, Rickmansworth, Watford, and Welwyn Garden City. In three urban districts, namely Bushey, Hertford, and Stevenage, there has been a reduction in the estimated population. The rural districts with the largest increase are Hatfield, St. Albans, and Watford. In two rural districts, namely Barnet and Hitchin, there was a decrease in the estimated population.

TABLE 3.
BIRTH-RATE.

(For each District see Table 17. For number of births, legitimate and illegitimate, in each district, see Table 25.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	18·0	3,971*	18·2	2,003*	18·1	5,974*	21·8
1921-30 .	16·1	3,939*	14·8	1,739*	15·9	5,678*	18·3
1936 .	14·6	4,955	14·1	1,710	14·4	6,665	14·8
1937 .	14·9	5,233	13·8	1,724	14·6	6,957	14·9

* = Average.

The birth-rate for 1937 shows a further increase, being 14.6 compared with 14.4 for 1936 ; the increase refers to the urban districts only ; in the rural district the birth-rate has fallen from

14.1 to 13.8. The highest birth-rate in urban districts was 21.4 (Welwyn Garden City) and the lowest 10.8 (Chorley Wood). In the rural districts the highest birth-rate was 16.9 (Hatfield) and the lowest 10.9 (Braughing).

In two urban districts, Royston and Sawbridgeworth, and in one rural district, Braughing, the death-rate exceeded the birth-rate.

TABLE 4.
DEATH-RATE.
(For each District see Table 17.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	11·6	2,393*	11·6	1,221*	11·6	3,614*	14·3
1921-30 .	10·4	2,585*	10·3	1,145*	10·4	3,730*	11·8
1936 .	10·0	3,424	10·0	1,215	10·0	4,639	12·1
1937 .	10·1	3,546	10·2	1,276	10·1	4,822	12·4

* = Average.

There has been a slight increase in the death-rate during 1937, the figure being 10.1 compared with 10.0 for 1936. The increase was slightly higher in rural than in urban districts. The highest death-rate in the urban districts was 14.7 (Sawbridgeworth), and the lowest 6.1 (Rickmansworth). In the rural districts the highest was 14.9 (Braughing) and the lowest 7.2 (Barnet).

The increase in the death-rate was due to an increase in the number of deaths from influenza and cerebral hæmorrhage. This is shown by the fact that the increase in the number of deaths from these two causes was exactly the same figure as the increase in deaths from all causes.

TABLE 5.
INFANT MORTALITY.
(For each District see Table 17.)

	Hertfordshire.						England. and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
1911-20 .	67	259*	58	119*	64	378*	100
1921-30 .	46	192*	45	79*	47	271*	81
1936 .	40	199	30	52	37	251	59
1937 .	38	200	36	63	37	263	58

* = Average.

The infant mortality, which is the number of deaths under twelve months per 1,000 births, remains the same as last year, namely 37, the actual number of deaths being 263 compared with 251 for 1936.

There has been a decrease in the infant mortality in the urban districts and an increase in the rural districts; last year the position was reversed. In one district, namely Baldock, no deaths under the age of one year occurred. The lowest infant mortality in urban districts was 14 (Tring) and the highest 114 (Sawbridgeworth). In rural districts the lowest figure was 20 (St. Albans) and the highest 82 (Braughing).

There has been an increase in the mortality amongst illegitimate infants, which was 61.7 compared with 41.5 for 1936. The mortality in urban districts was 52.6 and in rural districts 86.9.

There were 21 deaths from diarrhoea under the age of twelve months, compared with 9 last year.

For the prevention of epidemic diarrhoea in infants and young children efforts must be continued in the following directions: (1) The encouragement of the breast-feeding of infants, (2) the provision of a clean milk supply, (3) the attaining of a satisfactory standard of domiciliary cleanliness, (4) the abolition of refuse and flies, and (5) the protection of all milk in the home from contamination by dust and flies. The main precaution is cleanliness in regard to food utensils, food, and milk.

MATERNAL MORTALITY.

NUMBER OF DEATHS OF MOTHERS PER 1,000 BIRTHS.

The number of maternal deaths during the year was 17, compared with 14 last year and 15 in 1935. The maternal mortality was 2.4 compared with 2.1 last year and 2.4 in 1935. Of the 17 maternal deaths 5 were due to puerperal sepsis, compared with 3 last year, and 12 were due to other accidents and diseases of pregnancy and parturition, compared with 11 last year.

Eleven of the deaths occurred in rural districts and 6 in urban districts, the highest number in any district being 3 (Hitchin Rural District). Of the 12 deaths in rural districts 8 were due to non-septic conditions, and of these puerperal toxæmia and hæmorrhage were chiefly responsible. Puerperal toxæmia is a complication which still presents a real problem as its causation is still unknown. Even the most careful ante-natal

supervision does not always provide adequate protection against this complication as it may develop with tragic rapidity in an apparently healthy woman. There is some evidence that it is associated with mental anxiety and worry.

There were 9 cases of puerperal fever notified during the year, 8 from urban districts and one from rural districts. The largest number of cases notified from one district was 3 (Watford Urban District).

There were 75 notifications of puerperal pyrexia received during the year compared with 71 last year, 68 from urban districts and 7 from rural districts. During the last quarter of the year cases of puerperal fever were classed as puerperal pyrexia.

The following are the rates for maternal mortality for the County for each year to 1919 : 2·4, 2·1, 2·4, 3·5, 2·5, 2·3, 4·2, 2·9, 3·2, 3·2, 4·9, 2·2, 2·8, 4·2, 4·5, 3·8, 3·1, 3·4, 3·6, 2·4.

The scheme in the County for promoting the welfare of mothers includes special measures which aim at reducing maternal mortality and morbidity ; these measures are described elsewhere, but special attention is drawn to the provision of the services of obstetric specialists and of arrangements for the hospital treatment of complicated cases.

TABLE 6.
CANCER OR MALIGNANT DISEASE.

(Including carcinoma and rodent ulcer. For each district see Table 17.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
1911-20 .	1·2	252*	1·2	128*	1·2	380*	1·2
1921-30 .	1·4	342*	1·3	151*	1·3	493*	1·2
1936 .	1·4	488	1·4	179	1·4	667	1·6
1937 .	1·5	540	1·5	188	1·5	728	—

* = Average.

There is a slight increase in the death-rate from malignant disease, the figure being 1·5 for 1937 compared with 1·4 for 1936. The increase applies equally to both urban and rural districts. The highest death-rate in urban districts was 3·6 (Royston), and the lowest 0·88 (Bushey). In rural districts the highest figure was 2·1 (Watford), and the lowest 0·99 (Barnet).

Of the total number of 728 deaths, 540 were in urban districts and 188 in rural districts and 332 were males and 396 females. Compared with last year there has been a slight increase in the number of deaths in both males and females.

Of the total number of deaths, 420, of which 204 were males and 216 females, were over the age of 65, giving a percentage of 57·6 over that age. This figure emphasizes what has previously been stated, namely that malignant disease is most frequently associated with the degenerative changes which are a feature of advancing age, so that with increase in the expectation of life, an increase in the incidence of malignant disease is inevitable until the problem of its causation and prevention has been solved.

Success in the treatment of malignant disease depends upon early diagnosis and radical surgical treatment and the employment of such special forms of treatment as deep X-ray and radium therapy. Cases suitable for such special treatment are sent to special hospitals where facilities for its application are available.

TABLE 7.
TUBERCULOSIS.
CRUDE DEATH-RATES FROM PULMONARY TUBERCULOSIS.
(For each District see Table 17.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	·8	169*	·7	79*	·7	248*	1·0
1921-30 .	·6	158*	·5	63*	·5	221*	·7
1936 .	·45	156	·33	41	·42	197	·5
1937 .	·39	140	·32	41	·38	181	—

* = Average.

The death-rate from pulmonary tuberculosis shows a further decrease, being 0·38 compared with 0·42 for 1936. This is the first occasion on which the death-rate from this form of tuberculosis has been below 0·4 per 1,000. In the urban districts the highest death-rate was 1·07 (Ware) and the lowest 0·07 (Hertford). In the rural districts the highest death-rate was 1·24 (Welwyn) and the lowest 0·14 (St. Albans).

TABLE 8.

GIVING THE NOTIFICATION-RATE AND DEATH-RATE FROM
NON-PULMONARY TUBERCULOSIS.

District.	Popula- tion.	Number of Cases Notified.			Number of Deaths.			Attack Rate per 1,000.	Death- rate per 1,000.
		M.	F.	Total.	M.	F.	Total.		
<i>Urban.</i>									
Baldock	3,784	—	—	—	—	—	—	—	—
Barnet	20,750	1	2	3	—	—	—	.14	—
Berkhamsted	10,180	—	—	—	—	—	—	—	—
Bishop's Stortford	10,790	—	2	2	—	—	—	.14	—
Bushey	12,420	1	1	2	—	—	—	.16	—
Cheshunt	16,620	3	2	5	3	—	3	.30	.18
Chorleywood	3,514	1	3	4	1	—	1	1.13	.28
East Barnet	31,340	5	2	7	1	3	4	.22	.12
Harpenden	11,270	3	2	5	—	—	—	.45	—
Hemel Hempstead	18,570	2	1	3	—	—	—	.16	—
Hertford	12,970	2	—	2	—	1	1	.15	.07
Hitchin	16,830	—	6	6	—	—	—	.35	—
Hoddesdon	11,780	—	1	1	1	2	3	.08	.25
Letchworth	15,650	—	—	—	1	—	1	—	.06
Rickmansworth	17,430	—	—	—	1	—	1	—	.05
Royston	3,867	1	—	1	—	—	—	.26	—
St. Albans	35,840	2	3	5	3	2	5	.13	.13
Sawbridgeworth	2,992	—	—	—	—	—	—	—	—
Stevenage	5,666	—	1	1	1	—	1	.17	.17
Tring	4,448	1	1	2	—	—	—	.45	—
Ware	7,439	2	1	3	—	—	—	.40	—
Watford	64,880	4	7	11	1	1	2	.16	.03
Welwyn Gdn. City	11,370	3	2	5	1	1	2	.43	.17
Total Urban	350,400	31	37	68	14	10	24	.19	.07
<i>Rural.</i>									
Barnet	8,650	2	—	2	—	—	—	.23	—
Berkhamsted	4,272	—	—	—	1	—	1	—	.23
Braughing	8,870	1	—	1	1	—	1	.11	.11
Hatfield	15,720	1	—	1	—	1	1	.06	.06
Hemel Hempstead	8,653	—	1	1	2	—	2	.11	.23
Hertford	6,961	—	1	1	—	—	—	.14	—
Hitchin	18,860	2	1	3	—	1	1	.15	.05
St. Albans	20,260	2	2	4	2	—	2	.19	.09
Ware	9,612	1	2	3	—	—	—	.31	—
Watford	18,420	1	—	1	1	—	1	.05	.05
Welwyn	4,022	2	—	2	—	—	—	.49	—
Total Rural	124,300	12	7	19	7	2	9	.15	.07
Total Urban	350,400	31	37	68	14	10	24	.19	.07
Total Urban and Rural	474,700	43	44	87	21	12	33	.18	.07

TABLE 9.

GIVING PARTICULARS OF THE NOTIFICATION-RATE AND DEATH-RATE FROM PULMONARY TUBERCULOSIS.

District.	Popula- tion.	Number of Cases notified.			Number of Deaths.			Attack Rate per 1,000.	Death- rate per 1,000.
		M.	F.	Total.	M.	F.	Total.		
<i>Urban.</i>									
Baldock . . .	3,784	3	2	5	1	—	1	1.32	.26
Barnet . . .	20,750	3	4	7	3	2	5	.33	.24
Berkhamsted . . .	10,180	5	2	7	2	1	3	.68	.29
Bishop's Stortford . . .	10,790	2	3	5	5	1	6	.46	.55
Bushey . . .	12,420	6	1	7	3	4	7	.56	.56
Cheshunt . . .	16,620	14	5	19	4	—	4	1.14	.24
Chorleywood . . .	3,514	—	1	1	2	1	3	.28	.85
East Barnet . . .	31,340	13	16	29	4	5	9	.92	.28
Harpenden . . .	11,270	1	1	2	—	1	1	.17	.08
Hemel Hempstead . . .	18,570	3	5	8	3	4	7	.42	.37
Hertford . . .	12,970	5	1	6	—	1	1	.46	.07
Hitchin . . .	16,830	4	5	9	—	2	2	.53	.11
Hoddesdon . . .	11,780	5	4	9	2	4	6	.76	.50
Letchworth . . .	15,650	6	4	10	4	3	7	.63	.44
Rickmansworth . . .	17,430	4	5	9	—	5	5	.51	.28
Royston . . .	3,867	—	—	—	—	—	—	—	—
St. Albans . . .	35,840	23	12	35	15	7	22	.97	.61
Sawbridgeworth . . .	2,992	—	—	—	—	—	—	—	—
Stevenage . . .	5,666	—	1	1	—	1	1	.17	.17
Tring . . .	4,448	—	1	1	1	—	1	.22	.22
Ware . . .	7,439	7	1	8	3	5	8	1.07	1.07
Watford . . .	64,880	38	17	55	24	15	39	.84	.60
Welwyn Garden City . .	11,370	5	3	8	2	—	2	.70	.17
Total Urban . .	350,400	147	94	241	78	62	140	.68	.39
<i>Rural.</i>									
Barnet . . .	8,650	1	3	4	2	1	3	.46	.34
Berkhampstead . . .	4,272	4	3	7	1	—	1	1.63	.23
Braughing . . .	8,870	—	—	—	2	1	3	—	.33
Hatfield . . .	15,720	9	8	17	3	—	3	1.08	.19
Hemel Hempstead . . .	8,653	5	4	9	4	1	5	1.04	.57
Hertford . . .	6,961	1	—	1	1	1	2	.14	.28
Hitchin . . .	18,860	5	4	9	4	3	7	.47	.37
St. Albans . . .	20,260	8	9	17	1	2	3	.83	.14
Ware . . .	9,612	—	2	2	2	1	3	.20	.31
Watford . . .	18,420	7	5	12	5	1	6	.65	.32
Welwyn . . .	4,022	—	—	—	4	1	5	—	1.24
Total Rural . .	124,300	40	38	78	29	12	41	.62	.32
Total Urban . .	350,400	147	94	241	78	62	140	.68	.39
Total Urban and Rural	474,700	187	132	319	107	74	181	.67	.38

The number of cases of tuberculosis notified during the year was 406 compared with 441 for the previous year. Of the total number 319 were pulmonary cases compared with 336 last year and 87, compared with 105 last year, were non-pulmonary cases. In the following tables particulars are given of the number of cases notified and of the number of deaths from tuberculosis in the various urban and rural districts in the County.

Of the deaths from pulmonary tuberculosis 140 occurred in urban districts, compared with 156 last year, and 41 in rural districts, the same as last year. Of the total deaths 107 were males compared with 115 last year and 74 were females compared with 82 for the previous year.

As regards the number of deaths in the various age groups the highest number of deaths from pulmonary tuberculosis, namely 47, occurred in the age group 25-35, the next highest number being in the age group 35-45. In the young adult age group, 15-25, deaths in females predominated in urban districts but in rural districts the figure for males was higher than that for females in this group. In urban districts the number of deaths in the age group 55-65 was relatively high for males. No deaths from the pulmonary form of the disease occurred under the age of 15.

Of the deaths from non-pulmonary tuberculosis 24 occurred in urban districts compared with 38 last year and 9 in rural districts, compared with 12. In twelve urban and four rural districts there have been no deaths from non-pulmonary tuberculosis. The death-rate from non-pulmonary tuberculosis is 0·07 compared with 0·10 last year. In urban districts the highest death-rate from this disease was 0·28 (Chorleywood) and in rural districts 0·23 (Berkhamsted and Hemel Hempstead).

The largest number of deaths from non-pulmonary tuberculosis occurred in the age group 5-15. There were 10 deaths under the age of 5 years compared with 17 last year, including 4 deaths under the age of 12 months.

Preventive Measures.—The measures which have to be adopted with a view to the control and prevention of tuberculosis are now fully recognized. They include improved housing conditions, adequate and sufficient food, a milk supply free from tubercle bacilli, the early diagnosis and treatment of cases of the disease and the investigation and examination of contacts. The one common factor which may be accepted as responsible for diminished resistance to infection with the bacilli of tubercle is impaired nutrition which may be due to

several causes which include improper or insufficient food, insufficient fresh moving air and mental or physical fatigue. Improvement in the standard of nutrition and the removal of the source of infection from the home or of those in contact with such source of infection, especially when they are susceptible, constitute the main foundation of preventive treatment.

During the year particulars have been received of 267 contacts who have been examined compared with 157 last year. Of this number 20 were found to have definite tuberculosis of the lungs and one was a suspected case.

During the year 269 home conditions forms were forwarded by the Health Visitors, from which the following particulars have been obtained.

TABLE 10.
HOME CONDITIONS.

	Good.	Indifferent.	Bad.
Insured	78·5	13·9	7·6
Uninsured	84·2	12·6	3·2
Total	81·2	13·3	5·5

NUMBER OF PERSONS PER BEDROOM.

	Two or less.	Three.	Four.	Over Four.
Insured	89·5	9·8	·7	—
Uninsured	89·8	8·8	·7	7
Total	89·6	9·3	·7	·4

The figures in the above table show that compared with last year the percentage of bad home conditions is higher as is that of two or less persons per bedroom.

Examination of Patients.—During the year 1109 persons were examined, compared with 970 last year, with a view to diagnosis and, if necessary, treatment. The results found on

examination were as follows : Pulmonary or hilum tuberculosis, 307 ; non-pulmonary tuberculosis, 66 ; combined pulmonary and non-pulmonary tuberculosis, 11 ; suspects, 85 ; not tuberculosis, 640. The figure of persons examined also includes a number of contacts to which reference has previously been made.

The number of cases admitted to the County Sanatorium for observation were 48 compared with 36 last year.

Treatment.—During the year 382 patients were admitted to sanatoria and hospitals for observation and treatment. At the end of the year 187 patients were under treatment or observation in these institutions. In addition to these there were admitted to Public Assistance Institutions 122 patients, of whom 101 were suffering from pulmonary tuberculosis ; 74 patients were discharged from such institutions during the year. At the end of the year there were 18 patients in Public Assistance institutions of whom 16 were suffering from pulmonary tuberculosis.

The question of the provision of new and up-to-date accommodation at the County Sanatorium has been considered during the year and the creation of a new and commodious block to provide for 140 patients with special accommodation for “ suspected ” cases will be commenced at an early date.

Cases of cutaneous tuberculosis receive light treatment at London Hospitals ; during the year 27 patients received such treatment, compared with 20 last year.

Dr. Sharpe, Medical Superintendent of the County Sanatorium, reports that during the year 276 patients were admitted and that in the case of 264 patients a term of treatment or observation was completed. Of these, 173 had improved, 21 had not improved, 29 had died, and in 41 the diagnosis was not confirmed.

The condition of the patients admitted to the Sanatorium during the year was as follows : Early stage, 19 ; intermediate stage, 126 ; advanced stage, 83 ; suspects, 48.

The results obtained during the year are shown as follows : Able to work or improved, 173 ; not improved, 15 ; worse, 6 ; diagnosis not confirmed, 41 ; died, 29.

Of the cases admitted, in 180 the sputum was positive and in 96 the sputum was negative.

Forty-eight cases were admitted as suspects for observation of which 14 were found to have tuberculosis.

The daily average number of beds occupied during the year was 113.

Thirty-seven patients were transferred from the County Sanatorium to various institutions for the treatment of various complications or for other reasons. Of these, 19 were sent to a London hospital for special operative treatment for tuberculosis, 12 to general hospitals, and 6 to Public Assistance Institutions.

In addition to the ordinary conservative regime the following figures give some particulars of the various forms of treatment employed :—Tuberculin : 24 patients received injections of tuberculin. Gold treatment : 41 patients were treated with sanocrysin or myocrysin ; 54 patients were treated by artificial pneumothorax.

The number of X-ray films taken at the Hertford County Hospital during the year was 422 and patients were screened there on 14 occasions. A portable X-ray Apparatus installed at the Sanatorium is now in use and during the year 83 cases were screened and 17 films were taken by this portable apparatus.

The Laboratory has been in use during the whole of the year and 814 sputum examinations have been made.

Lectures are given to the patients periodically, explaining the method of Sanatorium treatment, and advice is given to them as to carrying out the treatment as far as possible, after returning to their homes.

Thanks are due to the members of the Ladies' Committee and other kind friends for gifts and help during the year.

The new workshops are not yet completed. The portable sound film apparatus has been in use during the winter months and 13 films have been shown ; this form of entertainment is much appreciated.

Nursing of Patients.—The following figures supplied to me by Miss Harrington give some indication of the work of the district nurses in the County in connection with the nursing of patients suffering from tuberculosis.

During the year 1937, the district nurses have attended 173 cases, of which 92 were nursing cases and 81 observation cases. They have also visited 214 cases for the purpose of taking temperatures. In addition 213 home condition reports, 58 shelter reports and 157 supplementary reports on patient's condition have been filled in and forwarded, making a total of 428 reports. The number of visits made by the district nurses to the homes of tuberculosis patients during the year was as follows :—domiciliary nursing, 4,534 ; visits for taking temperatures, 979 ; visits for obtaining shelter reports, 58 ; making a total of 5,571 visits in addition to the 213 visits paid to obtain

TABLE II.

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS AND OF OBSERVATION OF DOUBTFUL CASES DISCHARGED FROM RESIDENTIAL INSTITUTIONS DURING THE YEAR 1935.

Classification on admission to the Institution.	Class T.B. minus.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Total.	
			Under 3 months			3-6 months			6-12 months			More than 12 months				
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
PULMONARY TUBERCULOSIS.	Class T.B. plus Group 1.	Quiescent . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Not Quiescent . .	1	2	-	9	-	-	4	2	-	1	-	-	19	
		Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Class T.B. plus Group 2.	Quiescent . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Not Quiescent . .	5	6	-	34	11	-	13	4	1	2	4	-	80	
		Died in Institution	3	1	-	1	-	-	2	-	-	4	-	-	11	
	Class T.B. plus Group 3.	Quiescent . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Not Quiescent . .	4	2	-	14	5	-	8	5	-	3	1	1	43	
		Died in Institution	2	3	-	1	-	-	2	3	-	1	-	-	12	
	Non-PULMONARY TUBERCULOSIS.	Bones & Joints.	Quiescent . . .	-	-	-	-	-	-	-	-	-	-	-	4	4
			Not Quiescent . .	1	-	-	-	1	-	-	-	-	-	-	5	7
			Died in Institution	-	-	-	-	-	1	-	-	-	1	2	-	4
		Ab- dominal.	Quiescent . . .	-	-	-	-	-	-	-	-	3	-	-	1	4
			Not Quiescent . .	-	-	1	1	1	2	-	-	1	-	2	-	8
			Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-
		Other Organs.	Quiescent . . .	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Quiescent . .			1	-	-	2	-	-	-	-	-	1	-	-	4	
Died in Institution			1	-	-	-	-	-	-	-	-	-	-	-	1	
Peripheral Glands.		Quiescent . . .	-	-	2	-	-	1	-	-	3	-	-	2	8	
		Not Quiescent . .	-	-	6	-	1	2	-	-	2	-	-	-	11	
		Died in Institution	-	-	-	-	-	-	-	-	-	-	-	-	-	
			PULMONARY.						NON-PULMONARY.							
			Under 4 weeks			Over 4 weeks			Under 4 weeks			Over 4 weeks				
Observa- tion for purpose of diagnosis.	Tuberculous . . .	4	7	1	-	-	-	1	2	-	-	-	1	16		
	Non-tuberculous .	21	13	-	1	4	-	-	-	2	-	2	1	44		
	Doubtful . . .	1	1	-	-	-	-	-	-	1	-	1	-	4		

Particulars of patients who were under treatment in institutions for less than 28 days do not appear in this table.

home condition reports and 157 visits paid to obtain supplementary reports.

During the year the County Council health visitors have attended 13 cases. In addition, they have filled in 21 home condition reports, 4 shelter reports and 14 supplementary reports on patient's condition, making a total of 39 reports. The number of visits made by the health visitors to the homes of tuberculosis patients was 396.

The total number of visits paid to the homes of patients by the district nurses and health visitors was 6,219.

TABLE 12.
GIVING PARTICULARS OF DISPENSARY WORK, 1937.

Dispensaries.	Number of Nurses' attendances at Dispensary.	Number of patients.	Discharged—no further treatment necessary.	Sanatorium or discharged for other reasons.	On books at end of year.	Number of patients' attendances at Dispensary.
DISTRICT NURSES :						
Berkhampstead . . .	24	83	3	59	21	156
Bishop's Stortford . . .	24	66	2	44	20	157
East Barnet . . .	24	102	4	56	42	248
Hatfield . . .	24	94	6	66	22	222
Hemel Hempstead . . .	51	110	4	67	39	404
Hitchin . . .	52	182	13	116	53	538
Hertford . . .	48	211	11	144	56	561
St. Albans . . .	63	269	22	160	87	638
Waltham Cross . . .	52	96	5	62	29	288
COUNTY COUNCIL HEALTH VISITORS :—						
Barnet . . .	28	112	3	72	37	205
Letchworth . . .	52	148	3	88	57	479
Watford { Children . . .	24	91	9	36	46	202
Adults . . .	49	186	17	100	69	541
Totals . . .	515	1,750	102	1,070	578	4,639

Summary of New Work during the Year.—In the following table particulars are given of the work carried out during the year in connection with tuberculosis, including recommendations for treatment in the case of new patients :—

Number of cases examined . . .	1,109
Cases treated in sanatoria . . .	306
Cases treated in hospitals . . .	60
Cases treated at home . . .	299
Cases treated at dispensaries . . .	101
Cases under observation . . .	141
Contacts examined . . .	267
Cases recommended milk . . .	45
Shelters issued . . .	11
Specimens of sputum examined . . .	2,109
Tubercle bacilli present . . .	746

VENEREAL DISEASES.

The number of new patients from Hertfordshire attending clinics in London during 1937 was 334 compared with 332 for

TABLE 13.
ANNUAL SUMMARY FOR 1937.

Hospitals.	New Patients.					Total Atten- dances.	In- patient days.
	Syp.	S.C.	Gon.	Not V.D.	Total.		
Albert Dock	—	—	—	—	—	—	—
Royal Northern	3	—	30	28	61	2,460	6
Hospital for Sick Children, Gt. Ormond Street	—	—	—	18	18	78	—
Guy's	5	—	12	13	30	579	87
King's College	—	—	—	—	—	—	—
Metropolitan	—	—	—	1	1	3	—
Miller General	—	—	—	—	—	—	—
Royal Free	7	—	13	35	55	598	112
St. George's	—	—	5	4	9	94	—
St. John's, Lewisham	—	—	—	—	—	—	—
St. Mary's	4	—	12	8	24	462	21
St. Paul's	—	—	2	2	4	238	46
St. Thomas'	3	1	15	42	61	1,100	29
Seamen's	—	—	1	—	1	5	61
S. London for Women	—	—	—	—	—	—	—
University College	2	—	27	7	36	1,278	131
West London	—	—	—	3	3	37	—
Westminster	2	—	6	3	11	561	—
S. Army Mothers' Hospital	1	—	3	3	7	58	282
Children's Medical Home	1	—	—	—	1	—	482
Whitechapel Clinic	—	—	7	5	12	499	49
Total	28	1	133	172	334	8,050	1,306

The total number of pathological examinations made for private practitioners in the County during the year is 242.

1936 and 341 for 1935. Of this number 162 compared with 187 were cases of venereal disease, and 172 compared with 145 last year were found not to be suffering from this disease. The total attendances for the year were 8,050 compared with 8,828 for 1936. The number of in-patient days was 1,306 compared with 647 last year.

It will be observed from the above figures that the number of patients who attended the clinics in London is slightly higher than last year and that an increased number of individuals who were not suffering from venereal disease presented themselves for examination. A considerable increase in the number of in-patient days will be noted.

The amount of work carried out during the year is shown in the preceding table.

The number of pathological examinations carried out for practitioners was 242, compared with 166 for the previous year, while the number of pathological examinations carried out for or at the centres in London was 2,547. Of these examinations, 16 were for spirochætes, 1,461 for gonococci, 469 for Wassermann reaction, and 601 for other reasons.

BLIND PERSONS.

The scheme provided by the County Council under The Blind Persons' Act, 1920, provides for (a) Children under school age ; (b) employment ; (c) home workers ; (d) home teachers ; (e) maintenance grants in homes ; (f) maintenance grants in hostels ; (g) assistance to unemployable or other destitute blind persons ; (h) registration ; (j) general social welfare ; (k) miscellaneous.

The Blind Persons' Act, 1938, provides that blind persons will be entitled to old age pensions at the age of 40 and also amends the law in regard to the provision of assistance to blind persons by local authorities.

Registration.—The present position of the register of blind persons in the County is as follows :—

		<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
At 31st December, 1927	.	191	226	417
" 1928	.	211	249	460
" 1929	.	213	255	468
" 1930	.	207	255	462
" 1931	.	212	254	466
" 1932	.	205	251	456
" 1933	.	202	250	452
" 1934	.	202	246	448
" 1935	.	239	271	510
" 1936	.	249	291	540
" 1937	.	272	315	587

During 1937 there were added to the register 98 blind persons, compared with 91 last year, 46 males and 52 females. The number removed from the register during the year was 51, of which 23 were males and 28 were females ; 152 cases are at present receiving grants from the County Council, 81 males and 71 females.

I am indebted to the Secretary of the Hertfordshire Society for the Blind for the following information regarding the work in connection with the blind during the year.

The register this year records no child under one year but there are three children under 5, two boys and a girl. The girl has been sent to one of the N.I.B. Sunshine Homes, one boy is an imbecile and the other is in a public institution. All three were born blind and the imbecile child has a direct family history with three cousins similarly afflicted.

Of the children of school age four boys and one girl are in homes for mental cases, one is taught at home and one is a case of advanced lupus and is in hospital. I am glad to be able to report that six others are doing well in schools for the blind.

It is even more satisfactory to record the fact that fourteen blind people over 16 are now in training at various institutions and that there is not one case considered trainable by the Society which has not been accepted by the County Council. Various trainees who passed out this year are earning satisfactory wages and none are out of employment. The Society is especially interested in the training of the young blind and appreciates very much the sympathetic co-operation offered by the Education Department.

The problems of the unemployable blind have been especially pressing this year, as more persons than ever receive grants paid through the Society's voluntary representatives. The growth of the accountancy side of the Society's work has made it imperative to employ a book-keeper in the office and a further duty has been placed upon this department in the arrangements through which repayments for the sums expended for the prevention of blindness will be reclaimed from the County Council.

An increasingly large proportion of people become technically blind between 50 and 65 years of age, too old for regular training and too young for complete idleness. The policy of a Society charged with the general welfare of the blind must be largely influenced by this age group and the Hertfordshire Society has striven to meet the needs of this section with sympathy and efficiency. The increase in the number of Home

Teachers two years ago was an important factor in enabling the middle aged to get more frequent lessons in handicrafts, braille and moon. The formation and upkeep of the seven recreational centres, each of which depends on the help of a Home Teacher, became possible only when the staff was increased. The Society is justly proud of the work of the Home Teachers whose ready help, wise advice and devotion to their professional work have all combined to give the blind people of Hertfordshire a most efficient service.

There are a number of blind, varying about 40, in Poor Law Institutions. We visit these cases and we take any who are not bedridden to the recreational centres once a month. They appear to be cared for admirably and every consideration possible is made for their disability.

There are 33 deaf blind persons in Hertfordshire and we are trying to give them more of the specialized help which they require. The addition of a half-time voluntary worker to our staff has improved our opportunities to some extent.

MENTAL DEFICIENCY.

The number of cases reported with a view to investigation as to whether they were mentally defective within the meaning of the Acts was 132, compared with 134 last year. Of this number, 69 were found to be mentally defective and 3 were epileptic ; the remainder, after careful examination and testing as to their standard of intelligence, were not regarded as mentally defective within the meaning of the Acts.

TABLE 14.
PARTICULARS AS TO TYPE OF MENTAL DEFECT.

	Males.		Females.		Total.
	Under 21.	Over 21.	Under 21.	Over 21.	
Idiots	4	—	4	—	8
Imbeciles	16	—	5	1	22
Feeble-minded	15	3	16	2	36
Epileptic and Feeble-minded	1	—	1	1	3
Epileptic	1	—	2	—	3
Physically Defective . . .	7	—	9	—	16
Dull and Backward . . .	26	—	16	—	42
Doubtful	—	1	1	—	2
Totals	70	4	54	4	132

Table 14 gives the results of the examination of the 132 cases referred for examination, with particulars as to the condition and grade of defect. Of the 132 cases reported, 74 were males and 58 were females, while 8 were above the age of 21, and 124 were below that age. Of these cases, 85 were from urban districts and 47 from rural districts.

In the above table particulars are given of the type of defect in the cases examined, and of the group to which they belong. Of the 132 cases examined, 69 were returned as mentally defective, the largest group, namely 36, being males under the age of 21, and of this group 4 were idiots, 16 were imbeciles and 15 were feeble-minded. The number of females in this group was 26, of which 4 were idiots, 5 were imbeciles and 16 were feeble-minded. Of the total number examined, 63 were found not to be mentally defective within the meaning of the Acts, the largest number of these, namely 42, being returned as dull and backward.

TABLE 15.

PARTICULARS AS TO CIRCUMSTANCES AND PROCEDURE ADOPTED.

	Males.	Females.	Total.
Sent to Certified Institution or placed under Guardianship (including cases reported in 1935)	27	21	48
Referred to Education Committee	39	23	62
Under proper care, no action desired by parents, able to work, or no action taken	5	6	11
On waiting list	5	6	11
Totals	76	56	132

Institution Accommodation.—During the year, 48 cases were sent to Cell Barnes or were placed under guardianship, as against 52 so dealt with in 1936. Of the 48 cases thus dealt with 27 were males and 21 females. One case was placed under guardianship. The number of mental defectives in the certified accommodation at “Shrodells” at the end of the year was 11, including one defective on “licence”.

At the end of the year 41 cases were in the certified accommodation at the Bishop’s Stortford Institution, including 3 on leave on “licence”; of the total number in this institution at the end of the year, 16 were Hertfordshire cases, of whom 5 were on leave on licences from Cell Barnes Colony.

Difficulty is still being experienced in obtaining the consent of parents and guardians for the admission of mental defectives

to Cell Barnes Colony. The value of the training and supervision provided at the Colony is not yet fully appreciated. The question as to what constitutes neglect sometimes raises difficulties. The home conditions may be on the whole satisfactory and the defective may be well looked after in the home but during the day he is allowed to wander aimlessly about and so is exposed to the risk of injury or accident and this must be regarded as constituting neglect.

The desirability of appointing a mental welfare worker who would undertake the duties of Petitioning Officer and be responsible for the supervision of cases under guardianship, and cases out on licence from institutions or under statutory supervision is at present under consideration.

Guardianship.—During the year, one additional case was placed under guardianship, the same as last year. At the present time there are 64 under guardianship in the County, of which 42 are Hertfordshire cases and 22 are out-county cases.

Defectives placed under guardianship are visited twice yearly by your Medical Officer and more frequently by the Nurses who report from time to time as to the care and supervision which are being exercised. In addition the defective is visited and interviewed by "visitors" under the Act. Considerable care is exercised in the selection of guardians and due regard is paid to the home conditions.

Statutory Supervision.—This continues to be carried out by the nurses of the District Nursing Associations. The additional supervision which the visits of the nurse entails is undoubtedly of benefit to the interests of the defective.

The number of defectives to whom visits were paid by the nurses during 1937 was 320 compared with 347, and the number of visits paid to their homes was 2,363. Of the 320 defectives 175 were males and 145 were females, and of the 2,363 visits 1,281 were paid to males and 1,082 to females. During the year 175 forms giving particulars regarding the home conditions and circumstances of the defectives were forwarded to the County Medical Officer, compared with 244 last year.

PUBLIC ASSISTANCE.

The work in connection with the treatment and nursing of patients in the various institutions in the County continues to be maintained at high level of efficiency and recognition of this is shown by the increasing number of patients who are

applying for admission. The County Council has continued and extended the policy of subscribing to certain voluntary hospitals in the County and elsewhere for the treatment of County patients. The view is now becoming generally accepted that the treatment provided in certain Public Assistance Institutions and in the hospitals referred to conforms to modern hospital practice.

It is desirable to emphasize this view and for the public to recognize that the medical department of Public Assistance is equal in status and efficiency to the other medical services provided by the County Council. The various medical services of the County are units of one large service which must be co-ordinated and when practicable be interchangeable in order to secure the necessary facilities for the efficient treatment of all patients without delay. The help and assistance of the various Medical Officers employed by the County Council have been instrumental in securing the degree of co-ordination which now exists in the County.

Extensions and Improvements.—When comparison is made between the position as regards accommodation in Public Assistance Institutions which existed in 1929 and that which is provided to-day a considerable advance both in regard to extension and improvement of accommodation has been made. Attention has been given to the necessity for the provision of special accommodation which has been made for maternity cases, for children, for suspected cases of mental disorder and for septic and contagious cases. Such special provision is not restricted to the area in which the hospital or institution is situated but is available for cases from any part of the County, a provision which greatly facilitates action in dealing with such cases.

During the year some necessary and important extensions and improvements were undertaken or were under consideration.

At Oster House, St. Albans, provision of accommodation for the House Surgeon, complete reconstruction of the drainage system and the provision of a new laundry have been dealt with.

At Wellhouse Hospital, Barnet, the new home for maternity nurses and the new isolation block, constructed on the cubicle principle, have been completed. An excellent day room has also been added to Block C. Consideration is at present being given by the Public Assistance Committee for further necessary extensions including the provision of a new receiving ward block and enlargement of the nurses' home and maids' home. The

provision of certain new equipment including staff wash-hand basins in the wards, electric sterilizers, facilities for the sterilization of crockery and new screens and ward lockers have also been made during the year.

At Chalkdell House, Hitchin, by the alteration of the old block, previously used for children, additional accommodation of a very satisfactory character has been provided for chronic and senile female patients. The increase in population in this very large area in the north of the County calls, however, for some further extension and the necessity for this is now receiving consideration by the Public Assistance Committee. Some improvements in the maternity accommodation which is necessary for a few special maternity cases in the year is also being undertaken.

At Western House, Ware, a new mortuary which was a very necessary provision has been completed.

At Haymeads Institution, Bishop's Stortford, the old ambulance has been replaced by a new one of modern type. At the Children's Home at Stanstead, the adjoining house has been purchased which will provide for extension and necessary isolation provision.

At Shrodells, Watford, approval has been given to the installation of new and up-to-date machinery in the laundry.

The provision in some of the institutions of refrigerators, gas cookers and other special articles of equipment have been sanctioned, while matters relating to internal and external communication by telephone have been under consideration.

Consulting Staff.—The consulting staff, whose services are available for patients in Public Assistance Institutions, consists of a consulting surgeon, consulting physician, consulting physician for mental disorders, and consulting ophthalmic surgeon. In addition there are a consulting surgeon and an orthopædic surgeon for Shrodells, Watford. It is desirable to emphasize the value of the services rendered by the consulting staff in securing expert advice and treatment for patients in Public Assistance Institutions whose condition presents difficulties. The following is a summary of the visits of members of the consulting staff during the year :—

Dr. Segar.—Twelve visits which included 12 consultations and 6 operations. He states that the introduction of this work has been slow but that it is being appreciated in certain of the institutions.

Dr. Blaxland Levick.—Thirty-one visits ; several patients being seen at each visit. He states the medical arrangements

are entirely satisfactory in every way. The general medical care of patients within the County Institutions improves steadily from year to year.

Dr. Kimber (report from Dr. Roberts).—Eighteen visits ; 44 individual patients seen, all Public Assistance Institutions visited. He states that he considers a considerable amount of assistance was given and it was possible to advise *re* disposal of patients. Dr. Kimber considers that more frequent visits should be made, more particularly to Shrodells, Watford, where special accommodation is provided.

Mr. Milner.—Six visits ; he states that the ophthalmic advice to the inmates of the various institutions in the County will increase in future because of the new scheme for the prevention of blindness which has come into operation.

Mr. Jory.—Visits to Wellhouse and Shrodells to deal chiefly with cases of mastoid disease. Three operations at Shrodells and three at Wellhouse.

Mr. McClure.—Performed 58 operations at Shrodells during the year.

Medical Staff.—During the year it was decided that owing to the addition of the new maternity unit and of the ward for sick children at Oster House, St. Albans, that the time had come when it would be necessary to appoint a resident House Surgeon and this new appointment was made.

The extent of the surgical work carried out by the medical staff at four of the institutions in the County is shown in the following table :—

Institution.	1936		1937	
	Major Operations	Minor Operations	Major Operations	Minor Operations
Haymeads .	68	54	52	64
Oster House .	34	59	41	82
Shrodells .	180	70	219	71
Wellhouse .	651	368	658	425
Total .	933	551	970	642

The following additional particulars in respect of Wellhouse Hospital, which is the largest and most up-to-date Public Assistance Institution in the County, are of interest :—

Operations performed by Consultants	7
„ „ Medical Superintendent	537
„ „ other members of Medical Staff	539
Anæsthetics administered by Dr. Elam	601
Number of operations on Hertfordshire patients	720
„ „ Middlesex patients	363

At Shrodells, Watford, of the total number of 290 operations during the year, 61 were performed by the consulting staff and the remainder by the Medical Officer, the Deputy Medical Officer and the Assistant Medical Officer.

At Oster House, St. Albans, there is a special unit for sick children to which there have been admitted 218 children during the year compared with 170 for the previous year. The conditions for which children were most frequently admitted are shown by the following particulars as to classification—broncho-pneumonia, 18; impetigo, 18; abscess formation, 14; accidents, 12; enteritis, 11; tonsillitis, 10; malnutrition, 9; and influenza, infantile eczema, inflammation of eye and scabies 8 respectively. Special attention has been given to the diets for sick children with good results, especially in the treatment of malnutrition. A new treatment for tuberculous peritonitis depending on the utilization of sugars by the body and based on work being carried out for the Medical Research Council by Dr. D. C. Wallace-Ross has been in use since July with encouraging results, more especially as to its effect on temperature and body weight.

Nursing Service.—Arrangements have been made during the year in connection with carrying out the provisions of new schemes for the training of midwives. Wellhouse Hospital has been approved for the first period of training and for this purpose a new sister tutor will be appointed; the annual number of pupil midwives to be trained is 10. The Maternity Home at Watford has been approved for the second period of training.

Questions relating to the nursing staff of Public Assistance Institutions and to improvements in the conditions of service have been frequently considered by the Public Assistance Committee during the year. The revised scale of salaries, which provides for a considerable advance on scales previously adopted, came into operation during the year. The question of hours of service has also been under review from time to time and the Committee has taken action to secure a reduction of the hours on duty to a maximum of 54 hours per week; in some institutions the number is already below this figure. It has, however, been recognized that 48 hours per week or 96 hours per fortnight will have to be aimed at in the near future. The provision

made for the accommodation for nurses in the Nurses' Homes at the various institutions in the County is now excellent, although the question of extension in some of these homes must inevitably arise owing to increased requirements in regard to nursing staff.

During the year a scheme of recognition of long service nurses was instituted. Medals and badges were presented to a large number of nurses who had completed periods of twenty, ten, and five years' service ; in addition one year's increment of salary is given after ten years' service and two years' increment after twenty years. The medals were specially designed for the purpose and consisted of a silver medal for twenty years' service, a bronze medal for ten years' service, with a badge for five years' service. This mark of recognition of their long service on the part of the County Council has been much appreciated by the nurses concerned.

The question of the training of assistant nurses for chronic cases has been under review during the year and a scheme was formulated which provides for the necessary training to be carried out at Haymeads, Chalkdell House, Oster House and Hempstead House. The number of trainees to be limited to six at each Institution. On the completion of two years' training and subject to passing an examination and to a satisfactory report from the Matron, the trainee will be appointed an assistant nurse at one of the institutions. The scheme is in operation at the four institutions mentioned and the numbers under training at the present time are as follows :—Chalkdell House, Hitchin, 2 ; Haymeads, Bishop's Stortford, 2 ; Hempstead House, Hemel Hempstead, 2 ; and Oster House, St. Albans, 5. Arrangements are being made to provide that the instruction given to the trainees at the various institutions will be of a uniform character. If successful this scheme should prove of real value, especially at the present time, in providing a source of supply of nurses who will be competent to undertake the care and nursing of chronic and senile cases.

During the year the District Nurses employed by District Nursing Associations paid 9,404 visits to 290 cases of sick and infirm persons in receipt of out-door relief. These figures are approximate and do not include patients in receipt of the Old Age Pension or other cases who are visited free of charge.

District Medical Service.—Some changes have been made in the service of District Medical Officers during the year. Dr. Buckley was appointed for No. 2 and No. 3 Districts of Hertford ; Dr. H. S. Wigfield for the Buntingford District

and Dr. B. Suggit for the parishes of Rushden, Sandon and Wallington.

Owing to the increase in population of the Watford area it has been divided into No. 1 and No. 2 Districts. Dr. J. Ronald Buchanan was appointed for No. 1 District and Dr. T. B. Wood was temporarily appointed for No. 2 District.

Vagrancy.—Attention continues to be paid to the health of vagrants. With the opening of the new casual wards at Bishop's Stortford the County policy of providing adequate as well as sanitary and comfortable accommodation for casuals has been completed. Every casual has the right to attendance by a doctor in case of illness. Suitable provision is made for treatment in special wards or in the case of protracted illness in the infirmaries. In addition, there is a monthly examination of every casual on one fixed day in all of the casual wards. By this examination the spread of infectious disease by casuals is guarded against. The care of the casual and the carrying out of measures of prevention and treatment are important in relation to the Public Health.

The following table shows the existing accommodation in the County Institutions.

Guardians Committee Area.	Institution.	SICK WARDS.			OTHER WARDS.			Total.
		Men.	Women.	Children.	Men.	Women.	Children.	
Barnet .	Barnet . . .	—	—	—	110	81	30	221
	„ Wellhouse Hospital	113	181	32	—	—	—	382
	„ Maternity Unit .	—	23	23	—	—	—	
	„ Ante-Natal Unit .	—	10	—	—	—	—	
	Hatfield . . .	—	53	—	3	17	—	73
Bishop's Stortford	Bishop's Stortford	75	84	7	59	77	11	313
Dacorum .	Hemel Hempstead	59	51	12	73	49	—	244
East Herts	Ware . . .	41	41	3	68	51	10	264
	<i>Infirm Ward</i>	28	22					
Hitchin .	Hitchin . . .	40	68	4	70	50	26	258
St. Albans	St. Albans . .	60	79	25	64	40	16	312
	<i>Maternity Unit</i>		14	14				
Watford .	Watford . . .	142	157	4	133	102	30	578
	Total . . .	558	783	134	580	467	123	2,645

Under agreements with Voluntary Hospitals:—

Hertford County Hospital	50
Bishop's Stortford Voluntary Hospital	20
North Herts & South Beds Hospital	22

Grand total . . . 2,737

EPIDEMIC DISEASES.

The death-rate from epidemic disease was 0·06 compared with 0·10 last year. The total number of deaths from epidemic disease for 1937 was 31, compared with 47 last year.

The death-rate from epidemic disease was again slightly higher in urban than in rural districts. The highest rate reached was 0·50 (Royston). In 12 urban and 5 rural districts no death from epidemic disease occurred.

TABLE 16.
DEATH-RATES FROM EPIDEMIC DISEASES.
(For each District see Table 18.)

	Hertfordshire.					
	Urban.		Rural.		County.	
	Rate.	Number.	Rate.	Number.	Rate.	Number.
1935	·14	47	·14	17	·14	64
1936	·10	36	·09	11	·10	47
1937	·05	20	·08	11	·06	31

Smallpox.—There were no cases of smallpox notified during the year.

Measles and Whooping-Cough.—The number of deaths from measles during the year was 10, compared with 5 last year. There were 8 deaths from whooping-cough compared with 12 last year, 7 in urban districts, and 1 in rural districts. Of the 8 deaths 1 was under the age of twelve months compared with 5 last year.

Scarlet Fever.—There were 778 notifications of scarlet fever during the year compared with 648 notifications last year. There were 4 deaths from scarlet fever during the year, compared with 2 last year. The largest number of notifications were received from the urban districts of Watford, East Barnet, Letchworth and Berkhamsted, and the rural districts of Hatfield and St. Albans.

Influenza.—There were 192 deaths from this disease, compared with 55 in 1936. Of this number 141 occurred in urban districts and 51 in rural districts. The increase in the number of deaths was due to a widespread outbreak of the disease in the early part of the year. The largest number of deaths, namely 50, occurred over the age of 75.

Diphtheria.—There were 139 cases of diphtheria notified during the year compared with 227 in 1936, 117 in the urban

districts and 22 in the rural districts. The highest number of notifications was received from the urban districts of Watford and East Barnet, and from the rural districts of St. Albans and Hemel Hempstead. There were 2 deaths from diphtheria compared with 10 last year, both from urban districts.

Enteric Fever and Paratyphoid Fever.—The total number of cases of enteric fever, including typhoid and paratyphoid fever, notified during the year was 12, compared with 26 last year. Of the cases of enteric fever, 10 were notified from urban districts and 2 from rural districts. There were no deaths from this disease during the year.

Undulant Fever.—There were 3 cases of undulant fever notified during the year, compared with 2 for 1936.

Puerperal Fever.—There were 9 cases of puerperal fever notified during the year, compared with 17 last year, 8 in urban districts and 1 in rural districts. Seventy-five cases of puerperal pyrexia, which now includes cases of puerperal fever, were notified compared with 71 last year, 68 in urban districts and 7 in rural districts. The largest number of cases of puerperal fever notified in urban districts was 3 (Watford). The deaths from puerperal fever numbered 5, compared with 3 last year.

Erysipelas.—There were 87 cases of erysipelas notified during the year, 65 in urban districts, and 22 in rural districts, compared with 90 for the previous year. The largest number notified in the urban districts was 18 (Barnet), and in the rural districts, 5 (Watford and St. Albans).

Meningococcal Meningitis and Encephalitis Lethargica.—There were 6 notifications of meningococcal meningitis, compared with 7 last year, 5 in urban districts and 1 in the rural districts. There were 2 deaths from this disease compared with 8 last year. There were 2 notifications of encephalitis lethargica, and 5 deaths from this disease compared with 8 last year.

Poliomyelitis and Polioencephalitis.—There were 24 cases of poliomyelitis notified during the year, 21 in the urban districts and 3 in the rural districts, and 2 deaths from this cause occurred, compared with one last year. There were 2 deaths from polioencephalitis but no notifications of this disease were received.

Pneumonia and Broncho-pneumonia.—There were 342 cases of pneumonia, including all forms, notified during the year compared with 242 last year, the number of deaths from this

TABLE 17.—CHIEF STATISTICS OF URBAN AND RURAL DISTRICTS, 1937.

As compared with those for 1936 and with the averages for ten years 1911-1920 and 1921-1930.

DISTRICTS.		POPULATION.				Average Persons per Room, 1931.	BIRTH-RATE.§				DEATH-RATE.§				INFANT MORTALITY. ||				EPIDEMIC MORTALITY§		DEATH-RATE FROM PHTHISIS.§				DEATH-RATE FROM CANCER.§				DISTRICT.
		By estimate, 1937.	By Census, 1931.	By Census, 1921.	By Census, 1911.		1937.	1936.	10 years. *	10 years. ‡	1937.	1936.	10 years. *	10 years. ‡	1937.	1936.	10 years. *	10 years. ‡	1937.	1936.	1937.	1936.	10 years. *	10 years. ‡	1937.	1936.	10 years. *	10 years. ‡	
Urban. SUMMARY		350,400	280,977	230,696	211,183	72	14.9	14.6	16.1	18.0	10.1	10.0	10.4	11.6	38	40	46	67	05	10	39	45	6	8	1.5	1.4	1.4	1.2	Urban.
1	Baldock	3,784	3,170	2,518	2,338	73	14.5	18.7	16.1	19.9	10.0	13.3	13.2	14.8	...	29	47	85	...	...	26	54	6	9	1.8	3.8	1.7	1.2	1
2	Barnet	20,750	14,726	11,772	11,335	71	15.3	14.3	15.1	16.5	9.7	10.3	10.9	11.1	25	43	49	67	09	10	24	35	5	5	1.5	1.3	1.5	1.4	2
3	Berkhamsted ...	10,180	8,052	7,292	7,302	70	10.9	11.5	15.0	16.0	9.8	11.4	11.2	12.6	36	86	50	62	09	09	29	89	7	6	1.4	1.7	1.4	1.1	3
4	Bishop's Stortford	10,790	9,510	8,858	8,721	71	13.5	13.9	13.9	16.8	11.5	9.2	11.6	12.7	34	27	50	76	09	...	55	37	6	6	1.6	1.2	1.5	1.3	4
5	Bushey	12,420	11,245	8,088	6,978	70	12.1	11.3	14.2	15.3	9.2	8.1	9.2	9.6	26	7	51	59	...	...	56	16	5	6	88	1.5	1.3	1.1	5
6	Cheshunt	16,620	14,656	13,628	12,954	84	18.1	14.7	17.5	20.8	10.5	11.0	9.8	11.6	50	42	45	71	06	31	24	24	6	8	1.3	2.1	1.1	1.0	6
7	Chorleywood ...	3,514	3,295	2,444	1,947	61	10.8	9.4	14.3	...	10.5	9.7	9.5	...	53	30	55	...	...	85	28	5	...	1.9	1.4	1.1	...	7	
8	East Barnet ...	31,340	18,549	13,514	12,381	70	15.3	15.6	16.2	16.8	9.3	7.6	9.6	9.8	46	32	49	48	03	07	28	21	4	6	1.3	90	1.3	1.1	8
9	Harpenden	11,270	8,349	6,738	6,172	63	13.6	11.7	11.5	14.6	10.3	11.1	9.3	10.2	26	55	37	51	...	27	08	64	4	6	2.0	2.0	1.4	1.3	9
10	Hemel Hempstead	18,570	15,119	13,826	12,888	73	14.3	16.2	15.5	20.3	9.3	11.5	10.7	12.9	41	41	41	60	05	27	37	66	4	1.0	1.1	1.7	1.3	1.1	10
11	Hertford	12,970	11,378	10,702	10,670	75	11.6	14.1	15.6	19.1	10.4	9.3	11.6	13.8	66	33	47	78	07	07	07	38	6	9	1.9	1.0	1.4	1.7	11
12	Hitchin	16,830	14,383	13,525	12,497	73	16.5	14.7	16.3	19.7	11.4	10.3	11.8	13.2	43	55	61	67	...	24	11	43	5	7	2.7	1.3	1.4	1.3	12
13	Hoddesdon	11,780	6,811	5,409	5,196	72	15.6	15.3	17.0	18.3	12.5	11.5	12.2	13.1	75	56	50	70	...	08	50	59	3	1.0	1.5	85	1.5	1.6	13
14	Letchworth	15,650	14,454	10,302	5,324	78	13.9	14.0	17.3	...	10.0	8.4	8.1	...	27	32	45	...	...	06	44	32	5	...	1.3	1.1	1.0	...	14
15	Rickmansworth ...	17,430	10,809	7,982	7,227	72	17.9	16.2	18.3	18.4	6.1	8.6	10.9	10.0	32	16	44	65	11	14	28	19	5	7	98	1.3	9	9	15
16	Royston	3,867	3,831	3,826	3,985	65	12.1	11.0	13.3	15.6	13.9	11.5	12.8	13.0	21	...	48	74	50	...	...	26	4	1.0	3.6	1.5	1.9	1.4	16
17	St. Albans	35,840	28,624	25,593	24,120	70	14.7	14.5	14.4	17.6	11.1	11.2	10.8	11.6	39	44	55	65	...	05	61	70	6	7	1.7	1.5	1.4	1.2	17
18	Sawbridgeworth ...	2,992	2,604	2,296	2,304	72	11.6	9.2	16.5	17.0	14.7	10.9	10.5	13.5	114	37	56	76	33	...	...	68	2	6	1.6	1.7	1.1	7	18
19	Stevenage	5,666	5,476	5,038	4,856	71	14.1	11.8	16.4	19.1	11.2	11.5	10.7	11.6	25	73	49	63	...	17	17	17	2	6	2.2	1.3	1.2	1.1	19
20	Tring	4,448	4,364	4,345	4,481	68	15.7	10.1	16.6	18.9	13.2	12.3	13.1	13.2	14	22	33	54	...	...	22	67	6	7	1.7	90	1.8	1.4	20
21	Ware	7,439	6,181	5,949	5,842	82	14.1	16.6	18.6	19.6	11.6	11.2	11.8	13.3	48	41	44	69	...	...	107	10	6	7	93	1.4	1.2	1.1	21
22	Watford	64,880	56,805	46,284	41,203	77	14.9	14.8	16.8	18.0	9.7	10.2	9.7	10.7	29	39	50	73	06	07	60	45	7	9	1.3	1.4	1.2	1.0	22
23	Welwyn Gdn. City	11,370	8,586	767	462	76	21.4	20.8	...	...	7.2	7.7	...	...	49	63	...	...	...	09	17	55	...	...	1.2	93	...	...	23
Rural. SUMMARY		124,300	120,229	102,499	100,101	77	13.8	14.1	14.8	18.2	10.2	10.0	10.3	11.6	36	30	45	58	08	09	32	33	5	7	1.5	1.4	1.3	1.2	Rural.
1	Barnet	8,650	6,400	4,495	4,074	75	13.0	11.3	17.2	19.3	7.2	7.9	9.8	9.6	33	42	37	51	...	23	34	35	4	5	99	1.3	1.3	8	1
2	Berkhamsted ...	4,272	5,378	4,746	4,707	71	13.8	18.1	15.8	17.2	12.4	11.4	11.8	13.1	34	13	59	69	23	...	23	95	7	5	1.8	1.4	1.5	1.3	2
3	Braughing	8,870	13,594	14,068	14,762	66	10.9	12.7	...	...	14.9	12.7	...	...	82	17	...	...	33	...	33	44	...	...	1.8	1.6	...	...	3
4	Hatfield	15,720	11,001	8,431	8,234	73	16.9	16.8	17.8	19.1	8.3	9.6	9.5	11.9	26	16	39	54	...	19	19	34	4	8	1.2	1.7	1.3	1.1	4
5	Hemel Hempstead	8,653	8,270	6,858	6,565	73	13.5	14.7	17.6	18.9	10.2	10.4	10.8	12.7	34	8	47	54	...	23	57	59	4	7	1.5	1.0	1.3	1.2	5
6	Hertford	6,961	7,695	7,204	7,368	68	13.9	12.5	15.6	18.8	12.0	12.5	11.0	12.0	31	69	42	81	14	...	28	58	4	5	1.2	1.3	1.2	1.2	6
7	Hitchin	18,860	14,593	12,788	12,506	70	12.3	13.0	17.3	20.4	12.0	12.1	11.4	10.9	47	53	42	58	21	05	37	31	6	7	1.8	2.3	1.3	1.1	7
8	St. Albans	20,260	19,578	14,533	13,476	76	14.6	15.1	14.9	20.4	7.6	7.5	8.1	12.0	20	44	46	62	04	15	14	05	5	7	1.1	1.0	1.0	1.0	8
9	Ware	9,612	11,893	11,419	11,464	69	13.6	13.2	16.1	17.1	9.6	12.1	12.0	12.2	30	32	42	57	10	...	31	10	6	7	1.0	1.7	1.4	1.3	9
10	Watford	18,420	18,129	15,454	14,626	69	13.3	14.0	12.2	14.4	10.5	8.2	7.7	10.3	45	8	39	59	...	...	32	39	5	8	2.1	1.0	9	1.0	10
11	Welwyn	4,022	3,698	2,503	2,319	68	14.9	11.2	20.5	17.0	12.9	7.9	10.3	10.2	50	36	45	37	...	...	124	24	3	4	1.4	99	1.3	1.1	11
COUNTY SUMMARY		474,700	401,206	333,195	311,284	68	14.6	14.4	15.9	18.1	10.1	10.0	10.4	11.6	37	37	47	64	06	10	38	42	5	7	1.5	1.4	1.3	1.2	County

* 1921-1930.

‡ 1911-1920.

§ Per 1,000 of population.

|| Per 1,000 births.

cause being 225 compared with 230 last year. There were 178 deaths in urban districts and 47 in rural districts. It will be observed that although the number of notifications has increased by 100, due, no doubt, to the outbreak of influenza in the early part of the year, the number of deaths from pneumonia was less than last year. The largest number of deaths occurred in the age group 65-75 and there were 29 deaths under the age of one year.

Bronchitis.—The number of deaths from bronchitis was 141, compared with 133 last year. The number of deaths in urban districts was 105 and in rural districts 36. Of the total number of deaths from bronchitis 66 were males and 75 were females. There were 6 deaths from bronchitis under the age of twelve months, compared with 9 last year. Of the 141 deaths from bronchitis 72 were over the age of 75.

Heart Disease.—There was a decrease in the number of deaths from heart disease, which was 1,283, compared with 1,298 for 1936. Of the total number, 958 were in urban and 325 in rural districts, and 606 were males and 677 were females, the decrease affecting males only. Of the 1,283 deaths 583 were over the age of 75.

Other Diseases.—The number of deaths from acute and chronic Bright's disease was 128, compared with 136 last year. The number of deaths from cerebral hæmorrhage was 258 compared with 212. The number of deaths from cirrhosis of the liver was 19 as compared with 15 last year. The deaths from appendicitis were 22 as compared with 30 last year. There were 68 deaths from diabetes during the year, 55 in urban districts and 13 in rural districts. Of the total number of deaths from this disease there were 49 in persons over the age of 65. The number of deaths from violence was 244, including 60 deaths from suicide.

Other Notifiable Diseases.—During the year 2 cases of dysentery were notified, and the number of cases of ophthalmia neonatorum notified during the year was 13, the same as last year. Two cases of malaria were notified.

ISOLATION HOSPITALS.

The following is the scheme in the County for the provision of hospital accommodation for the treatment of infectious diseases under Section 63 of the Local Government Act, 1929.

The County has been divided into areas consisting of the

County Districts specified in the second column of the subjoined table, and it is proposed that accommodation shall be provided in each area not less than that specified in the third column and placed opposite to the number and description of the area :—

(1)	(2)	(3)
<i>No. of Area.</i>	<i>County Districts comprised in area.</i>	<i>Minimum accommodation in beds.</i>
i	Barnet U.D. East Barnet U.D. Barnet R.D.	50
ii	Borough of Hemel Hempstead Great Berkhamsted U.D.. Tring U.D. Berkhamsted R.D. Hemel Hempstead R.D.	45
iii	Borough of Hertford Bishop's Stortford U.D. Sawbridgeworth U.D. Ware U.D. Hoddesdon U.D. Cheshunt U.D. Hertford R.D. Ware R.D. Braughing R.D. (including Buntingford Hatfield R.D. R.D.).	80
iv	Baldock U.D. Hitchin U.D. Letchworth U.D. Royston U.D. Stevenage U.D. Hitchin R.D. (including Ashwell R.D.) Welwyn R.D.	60
v	City of St. Albans Harpenden U.D. Welwyn Garden City U.D. St. Albans R.D.	65
vi	Borough of Watford Bushey U.D. Chorleywood U.D. Rickmansworth U.D. Watford R.D.	100

The scheme of the County Council for the provision of hospital accommodation for the treatment of infectious diseases under the Local Government Act, 1929, is now in operation in all the areas of the County with the exception of the Dacorum area but it is anticipated that before long the necessary action will be taken to put the provisions of the scheme in this area into operation.

BACTERIOLOGICAL EXAMINATIONS.

In the following report, for which I am indebted to Dr. Kimber, particulars are given of the work carried out during the year at the laboratory at Hill End Hospital for the County Council and other Authorities.

HILL END HOSPITAL LABORATORY REPORT FOR 1937.

By *W. J. T. Kimber, L.R.C.P., D.P.M.*, Medical Superintendent,
and *A. Margaret McGrath, B.A., M.B., D.P.M.*, Pathologist.

The amount of work done in the Laboratory has again increased, this year the number of examinations made being 40·4 per cent greater than last year. The greater part of the additional work is in the number of specimens examined for the County and local authorities, and especially in the examination of milk samples. These are now examined by the plate count and coliform method and also by the methylene blue reduction test, the latter now being required by the Ministry of Health under the Milk (Special Designations) Order, 1936.

The comparison of the two methods has been interesting and an analysis of the results for the first six months of the year was sent on by the County Medical Officer of Health to the Ministry of Agriculture and Fisheries.

The local authorities are also becoming increasingly aware of the importance of the examination of throat swabs for Hæmolytic Streptococci and this has increased our work to a considerable extent.

During the latter part of the year specimens of fæces, sputum and blood were examined for cases of catarrhal jaundice in a small outbreak in one part of the County. No spirochoetes were found and feeding experiments to guinea pigs with cultures of a streptococci isolated from stools and a large gram negative diplococcus from urine produced only negative results.

A number of estimations of the bromide content of the blood of some confused and restless cases newly entering the Hospital have been made and the results suggest that in a

proportion of cases large amounts of bromide had been previously given. In some cases the elimination of the bromide led to a marked decrease in the confusional symptoms of the patient.

SUMMARY OF WORK UNDERTAKEN FOR THE COUNTY COUNCIL AND OUTSIDE AUTHORITIES.

SPUTUM

For T.B. (17·3 per cent positive)	1,328
For organisms other than T.B.	5

SWABS.

For K.L.B. (4·9 per cent positive)	763
For H.S. (26·0 per cent positive)	296
For other organisms	69

MILKS.

Accredited for bacteriology	1,453
Accredited for methylene blue test	1,453
Pasteurised (for bacteriology)	44
„ for phosphatase test	9
School milks for bacteriology	87
„ „ „ methylene blue test	87
Ordinary milks for bacteriology	238
„ „ „ methylene blue test	5

Milks for microscopy for tubercle bacilli.

School milk	87
Bulk samples other than school milk	28
Single cow samples	80
Undefined „	3
Biological test for T.B.	60
For agglutination against B. Abortus	2
For iron	11
Bacteriology of milk bottles	6
Human milk for bacteriology	4

URINE.

Routine	7
Chemical examination	9
Microscopy	87
For culture	50
For T.B.	16
Calculus for analysis	1
Urea clearance test	4

FÆCES.

For culture	13
For occult blood	26
For T.B.	12
Microscopy, worms, etc.	5
Fat content	2

PUS.

For T.B.	6
For organisms and culture	25
Smears for organisms	48

BLOOD.

Counts	58
Urea per cent	41
Culture	8
Sugar (single samples)	27
„ (tolerance curves)	4
W.R.	98
Meinicke	88
Complement fixation test for G.C.	5
Van der Bergh reaction	1
Widal	26
Agglutination for Weil's disease	3
Grouping	2
Clotting time	1
For carbon monoxide	1
Cow's blood for agglutination against B. Abortus	1

PLEURAL and other pathological fluids for culture microscopy, etc.

C.S.F. for urea	3
„ for microscopy	23
„ for T.B.	8
Culture	21
W.R.	8
Meinicke	4
Routine (Lange, cells, etc.)	31
Hairs for ringworm	10
Aschek-Zondeim test	2
Gastric Test Meals	2
Vaccines prepared	7
Sections	30
Water for bacteriology	27
„ „ chemical exam.	21
„ „ hardness only	2
Food for food poisoning organisms	4
Semen for spermatazoa	2
Biological tests (other than milks)	5
K.L.B. for virulence	4

7,037

CELL BARNES.

Fæces for culture	3
Fæces for T.B.	7
Blood for W.R.	277
Blood for Meinicke	277
C.S.F. for microscopy	2
Culture	2
Routine (Lange, cells, etc.)	2

Total for outside work 7,607*PUBLIC VACCINATION.*

The total number of vaccinations during the year was 1,663, compared with 1,664 last year.

This number is small and shows an increase of only one compared with last year, notwithstanding that the number of births has increased from 6,665 to 6,957. Any marked increase in

the number of persons vaccinated in the County will only be secured by the actual occurrence of cases of smallpox or by more stringent local action.

As regards the number of vaccinations carried out, the following figures refer to the twelve months ending 31st December, 1937 :—

Primary Vaccinations	.	1,581
Revaccinations	.	82
		<hr/>
Total	.	1,663

Of the primary vaccinations, 1,410 were under one year of age, and 171 were one year and upwards. The largest number of primary vaccinations during the period stated was carried out in the following districts: Barnet (263), Watford (106), St. Albans (91). The largest number of revaccinations was carried out in Barnet (10).

NURSING HOMES.

The Nursing Homes Registration Act, 1927, has been repealed by sections 187–195 of the Public Health Act, 1936.

A nursing home is defined as any premises used or intended to be used for the reception of and the providing of nursing for persons suffering from any sickness, injury, or infirmity, and includes a maternity home; it does not include (a) any hospital or premises maintained or controlled by a Government department or local authority or any other body of persons constituted by Special Act of Parliament or incorporated by Royal Charter; (b) any institution for lunatics within the meaning of the Lunacy Act, 1890; and (c) any certified institution, certified house, or approved home within the meaning of the Mental Deficiency Act, 1913. Voluntary Hospitals in the County have been exempted from the provisions of the Act.

Inspection of the nursing homes in the County is made from time to time and the general standard as regards efficiency of the administration and nursing service is noted. Attention is paid to protection against fire and to facilities for escape. The standard necessarily varies according to the size of the nursing home, the type of case admitted and the efficiency of the administrative and nursing staff. In the case of quite a number of homes admission is restricted to chronic and senile cases and such homes serve a very useful purpose in providing for the care and nursing of cases of this type. The majority of the nursing homes in the County are small and some of these provide accommodation for only one or two patients.

At the present time there are 62 nursing homes in the County which are registered under the Act.

MATERNITY AND CHILD WELFARE.

The Maternity and Child Welfare Act, 1918, by the provisions of which the County Council's scheme for the care of mothers and children was initiated, has been repealed by sections 200–205 of the Public Health Act, 1936. The new scheme for the provision of midwives in the County under the Midwives Act, 1936, came into operation during the year.

The scheme of Maternity and Child Welfare in the County has been fully described in previous reports. The following summary indicates the comprehensive character of the scheme:—

(1) 14 County Council Maternity and Child Welfare centres ; (2) 8 special ante-natal clinics ; (3) 40 voluntary centres at a number of which ante-natal supervision is also carried out ; (4) provision of maternity beds ; (5) convalescent home treatment ; (6) orthopædic treatment ; (7) hospital treatment ; (8) health visiting ; (9) milk to mothers and young children ; (10) the services of three obstetric specialists ; (11) the services of special nurses and (12) facilities for bacteriological examinations.

Consultations.—The Obstetric Consultants report as follows on their work during the year :—

Mr. Ellison.—During the year I was called into consultation on twenty-one occasions, under the maternity scheme of the County Council, twenty of these were for advice in the ante-natal period and one was a case of pelvic abscess after miscarriage. Of the twenty cases seen before birth in five I performed Cæsarean Section and in all these the mother and child made a complete recovery. One case suffered from heart disease. Two cases were seen with a view to the termination of pregnancy.

The outstanding feature of my work this year has been that it was almost entirely with a view to preventing trouble at the time of labour, instead of trying to remedy trouble that has already arisen. This to my mind is all to the good.

Mr. Norman White.—During this year I have seen nine cases ; of these, four were operation cases, and five were visits. I have also been consulted on the telephone two or three times by doctors, and have had one or two patients sent to see me at my Hospital Out-patient's Dept. in London.

I have seen no cases of puerperal sepsis. One can do little for such patients in one visit ; they should be in Hospital, and I

AND CHILD WELFARE CENTRES AND ANTE-NATAL CLINICS DURING 1937.

No. of deaths of children.	No. of children who had Orthopaedic Treatment.	No. of infant consultations.	No. of mothers' consultations.	No. of talks given at Centre.	No. of times Ante-natal Clinic open.	No. of patients who attended Clinic :		No. of attendances by :		Total attendances.	Average attendance of patients per session.	No. of consultations :		No. of Doctors' attendances at Infant Welfare Centres and Ante-natal Clinics.
						(a) Ante-natal patients.	(b) Post-natal patients.	(a) Ante-natal patients.	(b) Post-natal patients.			(a) Ante-natal.	(b) Post-natal.	
—	—	62	—	—	—	—	—	—	—	—	—	—	—	10
—	—	213	—	15	—	—	—	—	—	—	—	—	—	18
—	—	93	—	—	26	10	1	32	2	34	1.3	32	2	26
—	3	697	19	—	12	30	3	87	5	92	7.7	81	5	58
—	—	329	34	2	—	—	—	—	—	—	—	—	—	12
—	—	51	—	—	—	—	—	—	—	—	—	—	—	9
—	—	30	—	—	—	—	—	—	—	—	—	—	—	4
1	7	107	—	6	12	9	—	19	—	19	1.6	19	—	22
3	—	255	—	—	—	—	—	—	—	—	—	—	—	25
1	5	406	22	32	11	16	8	34	8	42	3.8	34	8	35
—	—	674	—	12	—	—	—	—	—	—	—	—	—	24
—	—	249	4	—	13	7	—	14	—	14	1.1	13	—	13
—	—	6	—	—	—	—	—	—	—	—	—	—	—	7
1	6	494	6	—	62	79	5	548	5	553	8.9	126	5	43
2	52	686	—	4	12	96	1	235	1	236	19.7	235	1	37
—	—	21	14	4	12	25	—	47	—	47	3.9	47	—	12
1	—	462	—	—	—	—	—	—	—	—	—	—	—	12
1	—	236	—	—	11	10	6	20	6	26	2.4	20	6	11
—	—	28	—	—	—	—	—	—	—	—	—	—	—	11
—	—	81	—	—	—	—	—	—	—	—	—	—	—	15
—	—	144	8	—	10	13	2	27	3	30	3.0	25	3	10
—	—	39	5	6	10	3	—	9	—	9	0.9	9	—	10
—	1	220	28	—	13	10	4	47	6	53	4.1	47	6	13
—	2	150	27	3	—	—	—	—	—	—	—	—	—	6
—	—	62	7	2	—	—	—	—	—	—	—	—	—	5
1	—	335	—	—	22	18	—	27	—	27	1.2	27	—	22
—	—	27	—	—	—	—	—	—	—	—	—	—	—	8
1	1	62	5	—	10	6	2	9	2	11	1.1	9	2	10
1	—	88	4	—	—	—	—	—	—	—	—	—	—	12
—	—	98	11	—	12	7	—	11	—	11	0.9	11	—	12
1	—	138	32	—	12	5	5	14	5	19	1.6	14	—	12
1	1	398	27	—	24	79	7	243	8	251	10.5	243	8	48
—	—	33	7	—	—	—	—	—	—	—	—	—	—	10
—	—	275	90	—	12	23	3	59	5	64	5.3	59	5	35
—	—	234	36	2	11	11	7	31	7	38	3.8	31	7	11
8	32	688	12	5	24	115	19	326	21	347	14.5	322	21	51
		801	5											
		924	6											
1	—	29	2	—	12	35	2	82	2	84	7.0	82	2	64
—	—	42	—	—	9	9	—	14	—	14	1.6	14	—	9
—	—	—	—	—	—	—	—	—	—	—	—	—	—	11
—	—	—	—	—	45	114	—	177	—	177	3.9	156	—	45
24	110	9,967	411	93	397	730	75	2,112	86	2,198	5.5	1,658	81	883
—	—	—	—	—	100	484	—	2,860	—	2,860	28.6	939	—	51

TABLE 19.
GIVING PARTICULARS OF ATTENDANCES AT VOLUNTARY WEIGHING
CENTRES DURING 1937.

Centre.	No of Times Centre Open.	No. of Mothers Attending.	No. of children who attended Centre for first time during 1937 and who on the date of their first attendance were :		No. of Children who attended Centre during 1937 and who at the end of the year were :		No. of Atten- dances at Centre by Children :		Total Children's Attendances.	Average Attendance of Children per Session.	No. of Deaths of Children.	No. of Children who had Orthopaedic Treatment.	No. of Talks given at Centre.
			(a) Under 1 year of age (Excluding those known to have attended Centre in another district previously)	(b) Between 1 and 5 years of age.	(a) Under 1 year of age.	(b) Over 1 year of age.	(a) Under 1 year of age.	(b) Between 1 and 5 years of age.					
Croxley Green	24	132	84	7	75	78	568	139	707	29.5	1	—	24
Cuffley	23	24	13	1	11	14	150	53	203	8.8	—	—	—
Great and Little Amwell	11	14	6	—	3	21	61	96	157	14.3	—	—	—
High Cross and Thundridge	12	35	14	8	12	34	74	203	277	23.1	—	—	3
King's Walden	38	11	2	1	2	14	7	265	272	7.2	—	—	—
St. Albans (The Camp)	26	109	35	9	25	83	397	498	895	34.4	—	—	—
St. Albans (Sopwell Lane)	27	64	27	14	18	61	312	319	631	23.4	—	—	—
Stanstead Abbots	23	30	14	7	9	28	114	88	202	8.8	1	1	3
Weston	11	23	5	—	5	29	53	238	291	26.5	—	—	—
Total	195	442	200	47	160	362	1736	1899	3635	18.6	2	2	30

think a Consultant is chiefly of use in persuading an unwilling patient to leave her home, or nursing-home, if she has refused to go.

In the cases of secondary post-partum hæmorrhage and hydatidiform mole, which I saw this year, I think the Service proved its value. In ante-natal cases, such as malpresentation, and suspected disproportion, the advice of a Consultant is also of great value to the General Practitioner.

Massage and Orthopædic Centres.—During the year 1937 the number of defects and morbid conditions dealt with in children under 5 years of age who attended and received treatment at the massage and orthopædic centres in the County was 410. Of this number there were 230 cases of acquired deformity of the lower limb, 78 cases of congenital deformity of the lower limb, and 41 cases of morbid conditions or defects involving muscles and tendons.

Dental Treatment.—The following figures indicate the extent to which treatment was carried out during the year in the case of mothers and in children under 5 years of age ; the figures show a considerable increase compared with last year :—

Mothers and children inspected by the Dentists	1,127
Found to require treatment	1,021
Actually treated	994
Attendances made for treatment	1,400
Fillings	74
Extractions	3,413
Administrations of general anæsthetic for extractions	966
Other operations	155

All these figures show a considerable increase on last year's work.

DR. ORNSTEIN'S REPORT.

The Sessions at the Ante-natal and Child Welfare Centres were identical with those of the previous year.

The attendances at the Ante-natal Clinics showed a further increase of 414 over the previous year. When the attendances for the year under review are compared with those for the year 1930, they show an increase of 1,878. There were no maternal deaths amongst the expectant mothers who attended the clinics. The post-natal attendances rose from 79 to 120.

Concurrently with the increased ante-natal attendances, the Child Welfare Centres showed an increased attendance of

TABLE 20.

GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OF AGE WHO ATTENDED THE CENTRES IN 1937, COMPARED WITH THOSE IN 1936. (Dr. Ornstein's District.)

Centre.	No. of times Centre was opened in		No. of children on books in		No. of attendances of children in		Average weekly attendances of children in		No. of deaths of children in		No. of children who had orthopædic treatment in		No. of children referred to Dental Clinics in		No. of nursing mothers referred to Dental Clinics in	
	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.
Barnet .	.	.	469	484	3,231	2,786	67	57	1	3	7	2	21	19	6	6
Hemel Hempstead .	.	.	284	282	2,649	2,374	52	47	1	4	—	1	—	—	—	—
Hertford .	.	.	355	312	2,455	2,080	48	40	4	1	2	1	31	17	6	2
Waltham Cross .	.	.	442	396	3,670	3,456	72	69	2	2	2	3	25	25	6	3
Ware Voluntary Centre .	.	.	295	320	1,788	1,952	39	40	1	1	1	—	7	7	2	5
Total .	247	250	1,845	1,794	13,793	12,648	56	51	9	11	12	7	84	68	20	16

1,145. Once a mother has attended as an ante-natal patient, she very readily attends the Welfare Centre with her baby.

Nine deaths occurred amongst the children who attended the centres—four due to pneumonia (one complicated by empyema), two to meningitis, one to appendicitis, one to marasmus and one to a congenital malformation of the stomach. It is encouraging to note that the deaths due to pneumonia were rather less than in the previous year.

Seventy-five children were immunized against diphtheria. This figure was divided amongst the following clinics : Barnet 25, Ware 20, Hertford 8, Hemel Hempstead 7, Waltham Cross 15.

The figures relating to the Centres are given in the tables.

We are again greatly indebted to the voluntary workers for their help at the Centres.

DR. ANDERSON'S REPORT.

The Sessions at the Ante-natal Centres were identical with those of the previous year except that bi-monthly sessions were increased to weekly sessions for District Nurses' patients at Wellington Court, St. Albans. The Sessions at the Infant Welfare Centres were similar to those of 1936 with the exception that Sessions were conducted weekly at Northcotts, Hatfield, instead of bi-monthly as formerly.

The number of expectant mothers availing themselves of ante-natal care at the County Council Centres shows an increase of 90 over the number for the previous year ; and taken over a three year period, the number has been almost doubled.

The expectant mother of to-day shows an ever increasing interest in such matters as diet and personal hygiene. She presents herself for ante-natal care at an early stage of pregnancy and, generally speaking, no difficulty is experienced in securing her regular attendance throughout pregnancy. The fear and prejudice formerly associated with dental treatment is rapidly disappearing as is evidenced by the marked increase in the number of mothers who availed themselves of dental treatment under the County Council's scheme. The number of post-natal consultations shows an increase of 49 over the number for 1936, due largely to the education of the mother to the necessity of routine examination six weeks after delivery. Much of the ill-health and chronic invalidism which sometimes follows on child-bearing may be prevented if routine post-natal examinations are made. Puerperal sepsis following on an instrumental delivery accounted for the only maternal death during the year.

TABLE 22

PARTICULARS OF CHILDREN UNDER FIVE YEARS OF AGE WHO ATTENDED THE CENTRES IN 1937,
COMPARED WITH THOSE OF 1936. (Dr. Anderson's District.)

Centre.	No. of times Centre opened in		No. of children on books in		No. of attendances of children in		Average attendance of children per clinic in		No. of deaths of children in		No. of children who had Orthopædic treatment in		No. of children referred to Dental Clinics in		No. of Nursing Mothers referred to Dental Clinics in	
	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.
Bishop's Stortford	51	48	158	175	2,743	2,608	54	54	—	—	1	2	16	8	4	4
Hatfield .	47	48	275	221	2,508	2,317	53	48	1	2	6	2	21	10	7	2
Hitchin .	48	46	502	432	3,604	3,083	75	67	2	3	3	11	30	38	15	4
Letchworth .	50	49	438	413	3,390	3,557	68	73	1	2	4	7	21	47	15	9
St. Albans .	48	51	727	705	4,240	5,126	88	100	2	5	5	3	69	56	9	1
Stevenage .	50	50	236	219	1,511	1,708	30	34	1	2	1	3	33	30	8	8
Total.	294	292	2,336	2,165	17,996	18,399	61	63	7	14	20	28	190	189	58	28

TABLE 23
PARTICULARS OF EXPECTANT MOTHERS WHO ATTENDED THE ANTE-NATAL CLINICS IN 1937, COMPARED WITH
THOSE OF 1936. (Dr. Anderson's District.)

Ante-Natal Clinic	No. of times Clinic opened in		No. of expectant mothers on books in		No. of consulta- tions of these with Medical Officer in		Average number of consulta- tions of expectant mothers in		No. of deaths amongst expectant mothers in		No. of expectant mothers referred to Dental Clinic in		No. of post- natal consul- tations in		Normal expectant mothers in 1937		Expectant mothers with abnormal conditions dependent on pregnancy in 1937		Expectant mothers with abnormal conditions not dependent on pregnancy in 1937		Percent- age of normal confin- ments in	
	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	Normal Confinement.	Abnorm'l Confinement.	Normal Confinement.	Abnorm'l Confinement.	Normal Confinement.	Abnorm'l Confinement.	1937.	1936.
Bishop's Stortford	23	23	50	46	161	135	7	6	—	16	14	1	3	3	31	2	—	4	1	—	84	91
Hatfield . . .	22	21	72	49	253	165	11	8	—	23	10	4	9	9	50	2	—	3	—	—	92	93
Hitchin . . .	67	69	295	290	1,295	1,220	19	18	—	55	32	91	52	52	175	22	11	12	2	3	84	85
Letchworth	23	23	46	38	154	93	7	4	—	24	8	24	4	4	21	2	3	2	—	—	86	86
St. Albans (District)	49	23	144	119	533	409	11	18	—	30	20	1	3	3	60	11	4	7	—	2	76	82
St. Albans (Oster House) . . .	51	20	158	122	689	332	14	17	1	32	9	1	—	—	91	5	8	8	11	12	81	88
Stevenage . . .	23	23	33	44	134	170	6	7	—	12	7	2	4	4	23	4	3	1	1	—	84	92
Total.	258	202	798	708	3,219	2,524	12	12	1	192	100	124	75	75	451	48	34	37	15	17	83	87

TABLE 24.

**GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OLD WHO ATTENDED THE CENTRES IN 1937, COMPARED WITH
THOSE IN 1936. (Dr. Sparrow's District.)**

Centre.	No. of times the Centre was open in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had Orthopaedic treatment in 1937.	No. of children referred to Dental Clinic in 1937.	No. of Nursing Mothers referred to the Dental Clinics in 1937.	No. of Defects and Ailments in	
	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.	1936.				1937.	1936.
Berkhampstead .	46	45	255	317	2,781	2,478	60	55½	1	3	—	27	—	10 defects in 30 patients	17 defects in 35 patients
Tring . . .	47	45	197	172	2,739	2,280	58	50½	1	—	—	11	—	12 among 23 patients	14 among 27 patients
Total . . .	93	90	452	489	5,520	4,758	59	53	2	3	—	38	—		

The standard of health among the children attending the Welfare Centres was uniformly good. The total number of children for 1937 shows an increase of 171 over that of the previous year. The average attendance per clinic throughout the whole year for all centres was 61. In necessitous cases and in children whose health has been impoverished by acute or chronic illness, the provision of milk free or at half cost is of undoubted value. A few deaths occurred during the neo-natal period. The common causes were prematurity and congenital malformations incompatible with post-natal life. Seven deaths occurred amongst the children who had attended at the Welfare Centres. Of these one was due to prematurity, one to tuberculous meningitis, one to hydrocephalus, three to accident, and in one the cause of death has not been ascertained.

Ninety-eight children were immunized against diphtheria during the year. This figure was divided amongst the following Centres as follows: Bishop's Stortford 3, Hatfield 18, Hitchin 14, Letchworth 16, St. Albans 40, Stevenage 7. In none of these immunized children is diphtheria reported to have occurred. The number of children immunized against diphtheria falls very far short of the ideal. Fear, prejudice, indifference on the part of the parents, and the absence of an epidemic of the disease probably account, in large measure, for the fact that so many young children, to whom diphtheria is such a fatal disease, remain unprotected.

Very many thanks are due to those ladies who act as Voluntary Helpers at the Welfare Centres. Their presence and help do much to make the centres attractive to the mothers and children.

The figures relating to the Ante-natal and Infant Welfare Clinics are shown in the accompanying tables.

HEALTH VISITORS, NURSES, AND MIDWIVES.

During the year the scheme which has been arranged between the County Council and the County Nursing Association for the provision of midwives under the Midwives Act, 1936, came into operation. The scheme has been initiated with a minimum of change and disturbance owing to the fact that the County was already provided with a complete service of midwives employed by the District Nursing Associations. So far the practical working of the scheme has proved to be satisfactory.

In the following report Miss Harrington, the County Health Visitor, Inspector of Midwives, and County Superintendent of Nurses, gives full particulars of the work of the health visitors, nurses, and midwives during the year.

*ANNUAL REPORT OF THE SUPERVISOR OF MID-
WIVES AND INSPECTOR OF HEALTH VISITORS
FOR THE YEAR 1937.*

During the year 1937 the Health Visiting work has been carried out by the 118 Health Visitors, including three whole-time County Council Nurses.

5,080 of the 6,217 babies born alive during 1936 (excluding Watford Urban District) have been visited by the Health Visitors, a percentage of 81·7 per cent.

Of the babies visited, 88 died before reaching the age of one year, showing a mortality of 17·3 per 1,000 ; 991 babies left the County before completing their first year. In all cases where the address could be obtained, it was forwarded to the local Health Authority.

From the Health Visitors' returns it is shown that 2,693 or 53·0 per cent of the infants were breast-fed ; 1,630 or 32·1 per cent were partly breast-fed ; 638 or 12·6 per cent were bottle-fed ; 1,044 or 20·6 per cent used dummies ; 1,403 or 27·6 per cent were vaccinated ; 4,005 or 78·8 per cent were up to the average weight.

The work of the Health Visitors is shown in Table 15.

**STATEMENT OF WORK AS SUPERVISOR OF MIDWIVES AND
INSPECTOR OF HEALTH VISITORS FOR THE YEAR 1937.**

Inspection of Midwives and Special Visits	1,940
Visits to Health Visitors, Nurses and Doctors	1,343
Attendance at Committee Meetings	127
Attendances at County Council and Voluntary Infant Welfare Centres and Schools	199
Letters, Circulars, etc., under the Public Health Act, 1936 . .	13,054

STATISTICS OF MIDWIVES PRACTISING IN THE COUNTY.

There were 257 trained midwives practising in the County on the 1st January, 1938. In addition there were 48 temporary midwives and 55 who have left or retired, making a total of 360 practising in 1937.

Of those in practice on the 1st January, 1938, 34 are employed by the Local Supervising Authority, 159 are employed by Voluntary Associations and 64 are in private practice.

In 1937 the total number of births was 6,957 excluding stillbirths. The midwives attended 6,124 cases. Of these 3,820 were domiciliary confinements ; 1,711 were with a doctor engaged and included 46 or 2·7 per cent stillbirths ; 2,109 were attended by midwives alone and included 37 or 1·8 per cent stillbirths.

TABLE 25. MIDWIVES AND THEIR WORK FOR THE YEAR 1937.

DISTRICT	POPULATION	TOTAL		BIRTHS ATTENDED BY MIDWIVES		INFANTS' DEATHS			NOTIFICATIONS				Maternal Deaths for whole County. Midwives		Midwives employed by Local Supervising Authority		Midwives employed by Voluntary Associations		Midwives in Private Practice		TOTAL NUMBER OF MIDWIVES
		Legitimate	Illegitimate	Midwife	With Doctor	Under 1 year	Rate per 1,000	Midwife's cases (Domiliary cases) under 14 days	Mother	Child	With Doctor	Midwife	Domiliary	In Institution	Domiliary	In Institution	Domiliary	In Institution	Domiliary	In Institution	
URBAN.																					
1. Baldock . . .	3,784	53	2	16	38	—	—	—	17	3	1	2	—	—	7	2	—	1	2	2	12
2. Barnet . . .	20,750	308	11	147	83	8	25.0	1	8	3	6	—	—	—	—	—	—	1	1	1	15
3. Berkhamsted . . .	10,180	108	3	73	35	4	36.0	1 (P)	12	8	2	—	—	—	—	—	—	1	1	—	3
4. Bishop's Stortford . . .	10,790	137	9	62	100	5	34.2	1 (P)	14	—	1	1	—	—	—	—	—	1	—	—	8
5. Bushey . . .	12,420	150	1	62	48	4	26.4	—	19	3	7	—	—	—	—	—	—	3	—	—	1
6. Cheshunt . . .	16,620	291	10	122	138	15	49.8	1 (P)	41	—	—	—	—	—	—	—	—	—	—	—	1
7. Chorley Wood . . .	3,514	38	—	6	12	2	52.6	—	21	8	7	—	—	—	—	—	—	—	—	—	1
8. East Barnet Valley . . .	31,340	470	10	196	125	22	45.8	—	44	2	2	2	—	—	—	—	—	—	—	—	1
9. Harpenden . . .	11,270	146	8	82	63	4	25.9	—	15	2	6	2	—	—	—	—	—	—	—	—	1
10. Hemel Hempstead . . .	18,570	248	19	80	68	11	41.1	—	50	11	7	4	—	—	—	—	—	—	—	—	1
11. Hertford . . .	12,970	143	8	87	66	10	66.2	1 (P)	19	2	5	1	—	—	—	—	—	—	—	—	1
12. Hitchin . . .	16,830	268	10	106	160	12	43.1	2 (2P)	7	2	2	3	—	—	—	—	—	—	—	—	1
13. Hoddesdon . . .	11,780	170	4	79	66	13	74.7	1	22	2	4	8	—	—	—	—	—	—	—	—	1
14. Letchworth . . .	15,650	216	3	73	142	6	27.3	—	4	2	7	—	—	—	—	—	—	—	—	—	1
15. Rickmansworth . . .	17,430	302	10	171	106	10	32.0	2 (2P)	57	11	14	4	—	—	—	—	—	—	—	—	1
16. Royston . . .	3,867	45	2	17	22	1	21.2	—	7	—	—	—	—	—	—	—	—	—	—	—	1
17. St. Albans . . .	35,840	497	31	290	222	21	39.7	4 (2P)	23	6	5	—	—	—	—	—	—	—	—	—	1
18. Sawbridgeworth . . .	2,992	32	3	17	17	4	114.2	1 (P)	268	36	13	16	—	—	—	—	—	—	—	—	1
19. Stevenage . . .	5,666	80	—	33	46	2	25.0	—	16	2	—	3	—	—	—	—	—	—	—	—	1
20. Tring . . .	4,448	66	4	29	29	1	14.2	—	8	—	2	—	—	—	—	—	—	—	—	—	1
21. Ware . . .	7,439	103	2	69	48	5	47.6	3	28	6	5	—	—	—	—	—	—	—	—	—	1
22. Watford . . .	64,880	936	32	621	249	28	28.9	3 (2P)	23	36	13	16	—	—	—	—	—	—	—	—	1
23. Welwyn Garden City . . .	11,370	236	8	97	113	12	49.1	—	16	2	—	3	—	—	—	—	—	—	—	—	1
Total for Urban Districts	350,400	5,043	190	2,635	1,996	200	38.2	20 (12P)	682	111	94	47	—	1	33	68	35	28	24	189	
RURAL.																					
1. Barnet . . .	8,650	117	4	60	49	4	33.0	1	10	3	3	—	—	—	—	—	—	1	—	—	4
2. Berkhamsted . . .	4,272	57	2	42	13	2	33.8	—	9	2	—	—	—	—	—	—	—	—	—	—	3
3. Braughing . . .	8,870	92	5	47	56	8	82.4	2	12	5	3	—	—	—	—	—	—	—	—	—	7
4. Hatfield . . .	15,720	256	10	107	97	7	26.3	—	6	1	6	—	—	—	—	—	—	—	—	—	5
5. Hemel Hempstead . . .	8,653	113	4	86	46	4	34.1	1 (P)	17	2	3	1	—	—	—	—	—	—	—	—	5
6. Hertford . . .	6,961	95	2	41	47	3	30.9	—	9	1	—	—	—	—	—	—	—	—	—	—	5
7. Hitchin . . .	18,860	222	10	124	92	11	47.4	—	33	6	4	2	2	—	—	—	—	—	—	—	1
8. St. Albans . . .	20,260	283	14	124	93	6	20.2	—	32	3	3	3	—	—	—	—	—	—	—	—	1
9. Ware . . .	9,612	124	8	64	43	4	30.3	1	17	4	2	—	—	—	—	—	—	—	—	—	6
10. Watford . . .	18,420	238	8	117	106	11	44.7	1 (P)	17	1	4	—	—	—	—	—	—	—	—	—	8
11. Welwyn . . .	4,022	58	2	17	22	3	50.0	—	5	2	2	—	—	—	—	—	—	—	—	—	1
Total for Rural Districts	124,300	1,655	69	829	664	63	36.5	6 (2P)	167	30	30	6	2	—	—	56	—	11	1	68	
Total for Urban Districts	350,400	5,043	190	2,635	1,996	200	38.2	20 (12P)	682	111	94	47	—	1	33	68	35	28	24	189	
Total for County . . .	474,700	6,698	259	3,464	2,660	263	37.8	26 (14P)	849	141	124	53	2	1	33	124	35	39	25	257	
		6,957		6,124						990		177									

Of the 6,124 cases attended by midwives, 2,304 were in Institutions. These included 94 or 4·1 per cent stillbirths.

The number of infants who died before the tenth day in domiciliary cases was 26 in midwives' cases born alive, being a mortality of 12·5 per 1,000. Of the 26 infants who died before the fourteenth day, 14 were premature. In addition to these cases, the midwives attended 171 abortions.

2,316 expectant mothers have attended ante-natal clinics. The number of ante-natal visits paid by the midwives was 22,619.

TABLE 26.

BIRTHS NOTIFIED UNDER THE NOTIFICATION OF BIRTHS ACT 1907
FROM JANUARY 1ST TO DECEMBER 31ST, 1936.

District.	BIRTHS.		CASES ATTENDED		STILLBORN		Premature.	INFANTS VISITED BY HEALTH VISITORS			Death rate per 1,000 of the infants under one year for the county excluding Watford.	No. of Health Visitors.
	Notified.	Returned by Registrar.	By Doctor:	By Midwife.	Doctors' Cases.	Midwives' Cases.		Visited.	Died under 1 year.	Death rate per 1,000 visited.		
Urban.												
1. Baldock	67	—	38	29	—	—	3	67	—	—	28·9	2
2. Barnet	509	10	355	164	19	—	46	209	3	14·4	42·7	1
3. Berkhamsted	115	5	37	83	1	3	8	92	3	32·6	86·2	3
4. Bishops Stortford	180	2	114	68	6	1	11	114	1	8·8	27·0	3
5. Bushey	144	5	90	59	3	—	9	113	1	8·8	7·0	2
6. Cheshunt	262	2	170	94	9	4	14	233	6	25·8	42·0	4
7. Chorleywood	24	3	18	9	1	—	2	20	1	50·0	30·3	1
8. East Barnet Valley	486	11	277	220	11	2	41	417	5	12·0	31·6	6
9. Harpenden	146	4	72	78	—	1	8	96	3	31·3	54·6	3
10. Hemel Hempstead	303	3	86	220	9	2	19	276	10	36·2	40·8	3
11. Hertford	183	7	81	109	1	1	9	153	4	26·1	32·6	4
12. Hitchin	236	11	151	96	8	1	15	175	5	28·6	54·6	3
13. Hoddesdon	190	1	74	117	7	—	28	172	5	29·1	55·8	5
14. Letchworth	231	5	166	70	6	2	12	204	3	14·7	32·4	2
15. Rickmansworth	259	27	150	136	8	—	9	209	4	19·1	16·0	4
16. Royston	52	—	31	21	2	1	6	43	—	—	—	1
17. St. Albans	490	4	257	237	14	5	39	400	2	5·0	44·6	3
18. Sawbridgeworth	34	—	11	23	3	—	2	31	1	32·3	37·0	2
19. Stevenage	79	—	40	39	3	—	4	59	1	16·9	73·5	2
20. Tring	52	—	30	22	2	—	5	49	1	20·4	22·2	1
21. Ware	116	—	31	85	—	1	3	110	3	27·3	40·6	3
22. Welwyn Garden City	239	2	138	103	2	—	19	221	6	27·1	6·7	1
Total for Urban Districts	4,397	102	2,417	2,082	115	24	312	3,463	68	19·6	40·4	59
Rural.												
1. Barnet	105	1	56	50	6	—	12	90	1	11·1	42·1	3
2. Berkhamsted	89	2	60	31	4	—	5	80	2	25·0	13·1	4
3. Braughing	118	1	65	54	5	—	4	103	2	19·4	17·5	5
4. Hatfield	233	4	157	80	9	1	3	208	5	24·0	16·1	7
5. Hemel Hempstead	172	4	87	89	1	—	12	161	1	6·2	8·0	6
6. Hertford	93	2	40	55	1	1	7	85	1	11·8	68·9	5
7. Hitchin	267	8	144	131	7	3	23	233	—	—	52·8	11
8. St. Albans	292	2	144	150	2	1	23	271	3	11·1	44·3	6
9. Ware	131	1	66	66	2	—	9	123	1	8·1	31·7	5
10. Watford	314	13	195	132	7	4	29	215	1	4·7	8·1	6
11. Welwyn	62	—	50	12	3	—	3	48	3	62·5	36·3	1
Total for Rural Districts	1,876	38	1,064	850	47	10	130	1,617	20	12·4	30·4	59
Total for Urban Districts	4,397	102	2,417	2,082	115	24	312	3,463	68	19·6	40·4	59
Total for County	6,273	140	3,481	2,932	162	34	442	5,080	88	17·8	37·4	118

TABLE 27.

TABLE OF HEALTH VISITORS' WORK CARRIED OUT UNDER THE NOTIFICATION OF BIRTHS ACT, 1907-1915.

District and Health Visitors.	Parishes in each District.	Population Covered.	No. of New Homes Visited.	No. of Babies under Supervision, 31st Dec., 1936.	Health Visits to Mothers and Babies.	Health Visitors' Attendances at Maternity Centre.	No. of Cases as Midwife and Maternity Nurse and Visits.	No. of Children aged 1-5 under Supervision, 31st Dec., 1936.	Visits to These.
No. 1 : Miss Milner .	Barnet, Arkley, Totteridge .	20,750	255	219	1,085	44		640	1,221
No. 2 : Miss Shore .	Tring Urban District .	4,448	39	54	694	44	cases 44 visits 796	165	786
No. 3 : Miss Cozens .	Letchworth and Willian .	15,650	199	197	2,391	52		501	1,733
Nurses working under the County Nursing Association.		345,709	4,122	4,760	41,440	2,708		13,739	46,419
	Total	386,557	4,615	5,230	45,610	2,848		15,045	50,159

Maternal Mortality.—Out of the 2,109 domiciliary midwifery cases, there were two maternal deaths, being a mortality of 1·0 per 1,000.

Medical Aid and any other Notifications Received.—The number of medical aid notices was 990 or 28·6 per cent.

Infant Life Protection.—The following figures give particulars of the number of persons registered under the Public Health Act, 1936, for the reception of children under the age of nine :—

Number of Children in care of Foster Mothers 1st January, 1937	284
Number of Children placed under Foster Mothers during year 1937	312
Number of Children removed from care of Foster Mothers during 1937	308
Number of Children in care of Foster Mothers 31st December, 1937	288
Number of new Foster Mothers registered during year 1937	67
Number of Foster Mothers having children under their care on 31st December, 1937	186
Number of Foster Mothers not found to be suitable for approval during 1937	3
Number of Certificates of Approval cancelled during 1937	nil

As regards the work carried out by the Infant Protection Visitors, the following information has been given me by Miss Harrington for 1937 :—

During the year ended 31st December, 1937, 393 children have been under supervision. The total number of visits paid to these children by the nurses employed by the District Nursing Associations and the County Council health visitors was 3,018 ; 106 forms giving particulars of the home conditions of foster mothers have been forwarded to the County Medical Officer, compared with 98 for the previous year.

Of the 3,018 visits, 2,719 have been paid by nurses employed by District Nursing Associations, and of the 106 forms giving particulars of home conditions, 95 have been filled in by these nurses.

SANITARY SERVICES AND HOUSING IN THE COUNTY.

This section provides information regarding the sanitary services in the various districts of the County. Each year it is brought up to date and it has been found to serve a useful purpose for reference regarding these important services. The reports from the rural districts indicate the value of the scheme initiated by the County Council for the extension of piped supplies of water. In those rural districts where serious shortage of water has been experienced during periods of dry weather the

provision of water from a source of adequate supply will materially ease the position. Special attention has been given during the year to the question of the purity of the water supplies in the various districts in the County.

Urban Districts.

BALDOCK.

Water Supply	.	Adequate supply from First Garden City, Ltd., Pumping Station for practically whole district; few wells. The water is of a high standard of purity both bacteriologically and chemically. Samples from each pumping station are taken every month by A. Sciver Esq., of Messrs. Rideal and Sciver, 28 Victoria Street, Westminster. It is not chlorinated, but complete plant is already installed at each pumping station which can be put into operation at short notice.
Sewage Disposal	.	Public system for whole district; disposal works near Icknield Way. Sewage enters large tank after screening and is pumped into a reservoir then run on to land and treated by systematic broad irrigation.
Refuse Collection and Disposal.		Once weekly in open horse-drawn conveyance. Disposal is carried out on the controlled system.
Infectious Diseases	.	Cases sent to North Herts Isolation Hospital; swabs examined at County's Public Health laboratories; antitoxin supplied when required; no steam disinfectors provided; clothing and houses disinfected by Sanitary Inspector.
Housing	.	Number of houses erected during 1937 31 Number of houses in process of erection 10 Number of houses overcrowded as defined by Housing Act, 1936 12

BARNET.

Water Supply	.	Public supply for the whole district from the Barnet and District Gas and Water Co., from wells sunk into the chalk; the supply is adequate. All the water supplied to this area is chlorinated. A pathological staff is maintained by the Water Co. The bulk of the water is examined daily, and each pumping station once a week. During 1936, 529 samples were analysed.
Sewage Disposal	.	Separate system for the whole district except in older portions of district, where combined system obtains. Certain outlying properties are drained to cesspools; part of Totteridge is drained into Finchley sewer. Sewage Farm is situated in Mays Lane, and is 56 acres in extent; method of disposal: three rotary filters, detritus and sedimentation tanks, and land irrigation; pumping is necessary for two sewers; some extension of the system is contemplated.
Refuse Collection and Disposal.		Weekly collection for whole district in covered mechanical conveyances; disposal by controlled tipping.

Infectious Diseases . Cases of infectious diseases removed to Barnet Joint Isolation Hospital; swabs examined by arrangement with Clinical Research Association; supplies of antitoxin kept for local practitioners. A steam disinfecter is available; houses are fumigated with formaldehyde.

Housing . . . Number of houses erected during 1937 . . . *nil*
 Number of houses in process of erection . . . *nil*
 Number of houses overcrowded, as defined by Housing Act, 1936 24
 Scheme for 90 additional houses in hand: 24 to meet the balance of overcrowded houses and remainder to meet the demand for housing accommodation in the district.

BERKHAMSTED.

Water Supply . Public supply for practically the whole district from the Berkhamsted Water Company, which also supplies adjoining districts; supply is adequate; there are a few wells. Water is not chlorinated; examined annually; question of chlorination under consideration.

Sewage Disposal . Conservancy system for whole district; sewage disposal works at Broadway, Berkhamsted, consist of septic tanks and rotary percolating filters, effluent discharged to Grand Union Canal.

Refuse Collection and Disposal. Weekly collection for whole district in covered carts with automatic covers. Controlled system of disposal.

Infectious Diseases Cases admitted to Aldbury Hospital; swabs sent to Clinical Research Association or Hill End laboratory; obtainable from Medical Officer of Health, Market Square, Hemel Hempstead; antitoxin supplied by Council through Sanitary Inspector; Immunization Scheme adopted; steam disinfecter available; disinfection carried out by sanitary staff.

Housing . . . Number of houses erected during 1937 . . . *nil*
 Number of Houses in process of erection . . . 28
 Number of houses overcrowded as defined by Housing Act, 1936 26

BISHOP'S STORTFORD.

Water Supply . Adequate supply from deep wells, which serves whole district; a few wells on the outskirts. Water not chlorinated; quarterly analysis.

Sewage Disposal . Public system for greater part of district; there are about 20 cesspools and a few pail closets in the outskirts. Sewage gravitates to tanks, is screened and pumped on to high level, and is dealt with by broad land irrigation; effluent to River Stort. Disposal works outside district in Essex.

Refuse Collection and Disposal. Weekly in covered mechanical and horse-drawn conveyances; partly controlled.

Infectious Diseases .	Cases admitted to East Herts Isolation Hospitals ; swabs sent to laboratory at Hill End Mental Hospital ; antitoxin kept at Sanitary Inspector's Office ; steam disinfectors at Isolation Hospital ; houses disinfected with formaldehyde.	
Housing . . .	Number of houses erected during 1937 . . .	32
	Number of houses in process of erection . . .	—
	Number of houses overcrowded as defined by Housing Act, 1936 . . .	48
BUSHBY.		
Water Supply .	Adequate supply for whole district from Colne Valley Water Co. Water chlorinated and frequently examined.	
Sewage Disposal .	Public system for whole district with the exception of the northern part and a few small areas. Disposal works have recently been extended, and are now capable of dealing with sewage from population of 17,000 ; anærobic and ærobic methods of treatment are adopted ; percolating filters and final filtration through sand.	
Refuse Collection and Disposal.	Weekly collection in covered mechanical conveyance. Disposal by controlled tipping.	
Infectious Diseases .	Cases admitted to Watford Joint Hospital, which serves district ; swabs sent to P.M. Hospital Laboratory, Watford ; Diphtheria Immunization Scheme ; antitoxin kept at Council Offices ; steam disinfectors at Isolation Hospital ; houses disinfected by Sanitary Inspector.	
Housing . . .	Number of houses erected during 1937 . . .	<i>nil</i>
	Number of houses overcrowded as defined by Housing Act, 1936 . . .	<i>nil</i>
	During 1937 all cases of overcrowding were abated.	
CHESHUNT.		
Water Supply .	Public supply for practically whole district from Metropolitan Water Board, private wells in a few country houses. Water subject to dual filtration and chlorination ; daily bacteriological examinations.	
Sewage Disposal .	Public system for whole district except some country houses. Sewage disposal works on Cheshunt Marsh in Parish of Enfield consists of septic tanks, revolving sprinklers, humus tanks, and filtration over several acres of ground.	
Refuse Collection and Disposal.	Weekly collection in covered mechanical conveyance ; disposal by controlled tipping.	
Infectious Diseases .	Cases removed to Cheshunt Isolation Hospital ; examination of swabs arranged by M.O.H. Antitoxin kept at U.D.C. Offices and house of M.O.H. No local disinfectors available, but there are arrangements for disinfection with Enfield ; house disinfection by formalin lamps.	
Housing . . .	Number of houses erected during 1937 . . .	<i>nil</i>
	Number of houses in process of erection . . .	<i>nil</i>
	Number of houses overcrowded as defined by Housing Act, 1936 . . .	39

CHORLEYWOOD.

Water Supply	.	Adequate supply for practically the whole district from the Rickmansworth and Uxbridge Valley Water Co. ; chlorination plant being installed.
Sewage disposal	.	Public system for greater part of district. Few cesspools. Disposal works at Maple Cross consist of detritus and screening chamber, two sedimentation tanks, one storm-water tank, three primary and three secondary filters, two humus tanks and four sludge digestion tanks. The effluent discharged into tributary of River Colne.
Refuse Collection and Disposal.		Collection weekly in covered mechanical conveyance. Refuse disposed of by method of controlled tipping.
Infectious Diseases	.	Cases admitted to Joint Hospital serving district, swabs sent to Clinical Research Association. Antitoxin kept by Council. Steam disinfectors at Isolation Hospital ; houses disinfected by Sanitary Inspector.
Housing	.	Number of houses erected during 1937 . <i>nil</i> Number of houses in process of erection . <i>nil</i> Number of houses overcrowded as defined by Housing Act, 1936 1

EAST BARNET.

Water Supply	.	Adequate supply from the Barnet District Gas and Water Co. from wells and borings ; whole district served. Water chlorinated ; samples examined daily.
Sewage Disposal	.	The whole district, except for a very small number of large houses in isolated positions, is sewered on the separate system, five main sewers and two rising mains from pumping stations conveying the sewage to the disposal works situated at the junction of Osidge Lane and Brunswick Park Road. The new disposal works, designed for a dry weather flow of 1,250,000 gallons a day, is about to commence full treatment. They consist of screen and detritus tank with mechanical dredger, preliminary settlement tanks with mechanical scrapers, secondary settlement tanks, aeration tanks, final settlement tanks and percolating filters, the effluent passing into Pymmes Brook. The sludge is pumped to primary and secondary sludge digestion tanks from where it gravitates to sludge drying beds before being disposed of on the land.
Refuse Collection and Disposal.		A weekly collection of domestic and trade refuse is made over the whole of this district. Producers of offal, and offensive trades, receive three collections a week. In October, 1934, three new refuse collecting vehicles were brought into operation to replace the old system of tractor and trailers, and in 1936 a fourth vehicle was purchased. The vehicles are of 15 cubic yards capacity, rear loading and fitted with moving floors. Since the introduction of these vehicles a very considerable improvement has been effected in the method and cleanliness of the collection.

The method of disposal is controlled tipping at Oak Hill Park, East Barnet. Since the inception of the scheme about 15,000 tons of refuse have been disposed of without a complaint of any description. No vermin or flies have been found since the controlled tip was begun in April, 1933.

Infectious Diseases .	Cases to Barnet Joint Isolation Hospital ; swabs sent for examination to Clinical Research Association ; supplies of antitoxin kept by Council. Steam disinfectors available at Isolation Hospital. Rooms and contents sprayed with formalin.	
Housing . . .	Number of houses erected during 1937 .	<i>nil</i>
	Number of houses in process of erection .	<i>nil</i>
	Number of houses overcrowded as defined by Housing Act, 1936 . . .	21

HARPENDEN.

Water Supply .	Adequate supply from Harpenden Water Co. from deep wells in Lea Valley for almost whole district ; a few house wells are still in existence. Company also supplies Wheathampstead. Public supply of good standard of purity, not chlorinated ; examined quarterly ; more frequent examinations contemplated.	
Sewage Disposal .	Public system except for outlying farms and houses. Disposal works on eastern boundary of district. Slate beds, tanks, and percolating filters.	
Refuse Collection and Disposal	Weekly collection in covered conveyances ; fully controlled tipping in accordance with Ministry of Health's Regulations.	
Infectious Diseases .	Cases to Sisters Hospital St. Albans swabs, etc., sent to laboratory at Hill End Hospital. Antitoxin kept by Council. Disinfectors available at Sisters Hospital, to which clothes are sent. House disinfection by formalin spray and lamps.	
Housing . . .	Number of houses erected during 1937 .	<i>nil</i>
	Number of houses in process of erection .	<i>nil</i>
	Number of houses overcrowded as defined by Housing Act, 1936 . . .	4

HEMEL HEMPSTEAD BOROUGH.

Water Supply .	Adequate supply from two borings for whole district ; not chlorinated ; examined quarterly ; and chemically examined fortnightly.	
Sewage Disposal .	Public system except for outlying farms and cottages ; disposal works at Bennett's End ; sewage is pumped from Apsley and passes through sedimentation tanks and percolating filters, and is finally treated by broad irrigation.	
Refuse Collection and Disposal.	Weekly collection in covered mechanical conveyance ; controlled tipping.	
Infectious Diseases .	Cases to Joint Isolation Hospital ; swabs sent to laboratory at Hill End Hospital. Antitoxin supplied from Public Health Department ; steam disinfectors at Isolation Hospital. Immunization Scheme provided. Houses disinfected by formalin spray and lamps.	

Housing	.	Number of houses erected during 1937	<i>nil</i>
	.	Number of houses in process of erection	<i>nil</i>
	.	Number of houses overcrowded as defined by Housing Act, 1936	7

HERTFORD BOROUGH.

Water Supply	.	Adequate supply for whole district from wells in chalk owned by Corporation ; not chlorinated ; quarterly examinations.	
Sewage Disposal	.	Public system for whole district ; disposal works within eastern boundary of borough consist of detritus tanks, sedimentation tanks, activated sludge tanks, and sludge digestion,	
Refuse Collection and Disposal.	.	Weekly, in covered freighter ; disposal by controlled tipping.	
Infectious Diseases	.	Cases to East Herts Isolation Hospital ; swabs examined at laboratory at Hertford County Hospital. Diphtheria antitoxin at The Castle. Steam disinfectant at Isolation Hospital ; houses disinfected with formaldehyde.	
Housing	.	Number of houses erected during 1937	<i>nil</i>
	.	Number of houses in process of erection	63
	.	Number of houses overcrowded as defined by Housing Act, 1936	24
	.		10

HITCHIN.

Water supply	.	With the exception of a few isolated cases on the outskirts of the district, the whole of Hitchin obtains its water from a piped supply owned by the Council. The water is obtained from one shallow well (Bath Spring) and two deep wells (Well Head and Temple End), situated at Charlton, a hamlet on the south-west side of the district. The sub-soil of the district is chalk, the supply of water plentiful and even in times of drought has shown no serious signs of diminution. In addition to the town, the Council also supply water to the areas of Ickleford, Cadwell, St. Ippolyts, Gosmore and Little Almshoe in the Hitchin Rural District. Water chlorinated ; examinations fortnightly.	
Sewage disposal	.	Public system for whole district except Charlton and a few isolated houses ; disposal works at Grove Road consist of tanks and percolating filters. System also serves a few scattered houses outside the Urban District.	
Refuse collection and Disposal.	.	The collection and disposal of house refuse is under the control and supervision of the Sanitary Inspector. Trade and market refuse is also collected and disposed of by this department. Collection is carried out by three low-loading motor freighters of 7 cubic yards capacity, each vehicle being served by a driver and three men. Refuse is disposed of by means of controlled tipping at St. John's Road tip.	

Infectious diseases .	Cases sent by arrangement with the Joint Isolation Hospital ; antitoxins supplied free of cost. Steam disinfectors at Isolation Hospital ; house disinfection by spraying disinfected fluid followed by formaldehyde gas fumigation.	
Housing . . .	Number of houses erected during 1937 .	<i>nil</i>
	Number of houses in process of erection .	<i>nil</i>
	Number of houses overcrowded as defined by the Housing Act, 1936	23

HODDESDON.

Water Supply .	The northern part of the district formerly in the parish of Great Amwell is served by the Metropolitan Water Board. Water subject to dual filtration and chloramination ; daily bacteriological examinations. The remainder of the district is served by the Council's water from two deep wells in chalk, one at Hoddesdon and one at Broxbourne. A new deep well has been dug and it is anticipated that the additional supply thus afforded, will be sufficient for the growing needs of the district for many years. Houses in the rural parts of the district obtain supplies from wells and springs.	
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Sewage Disposal .	A scheme for sewerage the northern part of the district has been approved and work will probably be commenced in 1938. The remainder of the district (except for houses in undeveloped and low-lying parts of the area) is sewerage. Sewage disposal works consisting of detritus, settling tanks, contact beds and percolating filters serve the old urban district area. Sewage from Broxbourne and Wormley is disposed of by broad irrigation at the sewage farms. Extensive improvements have been carried out at these two farms during the year.	
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Refuse Collection and Disposal.	Weekly collection from practically the whole of the district by low-loading—dustless type—S.D. freighter. Refuse disposed of in refuse destructor and by controlled tipping.	
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Infectious Diseases .	Cases to East Herts Isolation Hospitals, where clothing is disinfected ; swabs sent to Hertford County Hospital. Diphtheria antitoxin kept at Council Offices. Formalin disinfection of houses.	
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Housing . . .	Number of houses erected during 1937 .	<i>nil</i>
	Number of houses in process of erection .	<i>nil</i>
	Number of houses overcrowded, as defined by Housing Act, 1936	20

LETCHEWORTH.

Water Supply .	Adequate supply for whole district from pumping stations at Baldock Road and Willian Road, reservoir at Weston Hill ; also supplies part of Hitchin Rural District and Baldock Urban. Water not chlorinated, but complete chlorination plant has been installed at both pumping stations ; standard of purity of water is high.	
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Sewage Disposal .	Whole district served except for few houses and farms in isolated positions ; separate systems for sewage and surface water ; sewage to sewage works and surface water empties into Pix Brook. Disposal works just beyond north-western boundary in Biggleswade R.D.C., consist of settling tanks, with primary and secondary filtration ; effluent discharged into Pix Brook.
Refuse Collection and Disposal.	House refuse weekly, trade refuse daily in some instances ; covered freighters ; disposal by controlled tipping.
Infectious Diseases .	Cases admitted to Hospital of North Herts Joint Board ; swabs sent to Thresh and Beale, London ; antitoxin kept at Isolation Hospital. Steam disinfecter at Isolation Hospital ; disinfection of houses carried out by Sanitary Inspector.
Housing . . .	Number of houses erected during 1937 <i>nil</i> Number of houses in process of erection <i>nil</i> Number of houses overcrowded, as defined by Housing Act, 1936. <i>nil</i>

RICKMANSWORTH.

Water Supply .	Adequate supply for practically whole district from Rickmansworth and Uxbridge Valley Water Co. and the Colne Valley Water Co. ; chlorination plant being installed ; chlorination and frequent examinations. A few isolated houses supplied from wells.
Sewage Disposal .	Public scheme for whole district with the exception of the parish of West Hyde, the new estates at Croxley Green and isolated houses. The sewage from the houses on the new estates at Croxley Green is carried by combined drains to private outfalls. The sewage from the public sewers gravitates to the pumping stations and is pumped to the sewage farm, where it is treated by broad irrigation.
Refuse Collection and Disposal.	Weekly in covered mechanical vehicles, the whole being done by direct labour. Refuse disposal by controlled tipping.
Infectious Diseases .	Cases to Watford Joint Isolation Hospital ; swabs sent to Peace Memorial Hospital Laboratory, Watford ; antitoxin kept at Council Offices and Police Station. Infected clothing sent for disinfection to Isolation Hospital ; house disinfection carried out by Sanitary Inspector.
Housing . . .	Number of houses erected by the Council during 1937 <i>nil</i> Number of houses in course of erection by Council during 1937 52 Number of houses overcrowded as defined by Housing Act, 1936 27

ROYSTON.

Water Supply .	Adequate public supply for whole district ; not chlorinated ; occasional examination ; high standard of purity.
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Sewage Disposal	.	Public system for whole district ; a few cesspools and earth-closets on outskirts.	
Scavenging	.	Weekly collection in whole district.	
Infectious Diseases	.	Cases to North Herts Joint Hospital at Letchworth ; swabs and antitoxin paid for if necessary.	
Housing	.	Number of houses erected during 1937	<i>nil</i>
	.	Number of houses in process of erection	<i>nil</i>
	.	Number of houses overcrowded as defined by Housing Act, 1936	1
ST. ALBANS CITY.			
Water Supply	.	Adequate supply for whole district from St. Albans Water Works Co. ; parts of surrounding districts also supplied. Chlorination plant to be installed, bacteriological standard is satisfactory.	
Sewage Disposal	.	Public system for whole district, except the added areas which are chiefly served by cesspools ; sewers have been laid in some of the added areas, thereby eliminating cesspools ; sewage disposal works at Park Street consist of septic tanks with sprinklers and primary and secondary filtration ; some extension of the system is contemplated.	
Refuse Collection and Disposal	.	Weekly collection in covered mechanical conveyance, daily in shopping area. Pulverizing and salvage plant ; pulverized refuse sold ; tins baled and sold.	
Infectious Diseases	.	Cases admitted to St. Albans Isolation Hospital ; swabs sent to Clinical Research Association and Hill End ; antitoxin provided by Council. Steam disinfectant at Isolation Hospital ; houses disinfected by formalin lamps. Scheme for immunization against diphtheria inaugurated Midsummer, 1935.	
Housing	.	Number of houses erected during 1937	<i>nil</i>
	.	Number of houses in process of erection	<i>nil</i>
SAWBRIDGEWORTH.			
Water Supply	.	Adequate supply for whole district, with the exception of the outlying hamlet of Spelbrook, from the Herts and Essex Waterworks Co. ; not chlorinated, water examined monthly ; good standard of purity ; shallow wells at Spelbrook.	
Sewage Disposal	.	Public system for whole district, with exception of Spelbrook ; sewage by gravitation to sewage farm. Disposal works in south-east of district consist of septic tanks and filter beds ; effluent to River Stort.	
Refuse Collection and Disposal.	.	Once weekly collection in covered horse-drawn conveyance ; partly controlled tipping.	
Infectious Diseases	.	Cases admitted to East Herts Isolation Hospital ; swabs sent to the County Laboratory at Hill End ; antitoxin kept by Sanitary Inspector. Steam disinfectant at Isolation Hospital ; house disinfection by Sanitary Inspector.	

Housing	.	Number of houses erected during 1937	<i>nil</i>
		Number of houses in process of erection	30
		Number of houses overcrowded as defined by Housing Act, 1936	6

STEVENAGE.

Water Supply	.	Good and adequate supply of drinking water is obtainable from the pumping station at Bromin Green. Water not chlorinated, monthly examinations; satisfactory standard of purity. The pumping station at Rook's Nest is now used only occasionally.	
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Sewage Disposal	.	Public system for whole town except few houses on outskirts. Disposal works are to the south of the town, adjoining Great North Road. Consists of filter beds.	
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Refuse Collection and Disposal.		Weekly collection in covered conveyances; partly controlled.	
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Infectious Diseases	.	Cases of infectious disease are sent to North Herts Joint Hospital. Swabs, etc., sent to the laboratory at Hill End Hospital. Antitoxin provided in necessitous cases. No steam disinfectors provided. Rooms disinfected by formaldehyde vapour or spray.	
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Housing	.	Number of houses erected during 1937	18
		Number of houses in process of erection	10
		Number of houses overcrowded as defined by Housing Act, 1936	9

TRING.

Water Supply	.	Adequate supply from Chiltern Hills Spring Water Co. available for whole district except Bulbourne hamlet, but a few houses are not connected; water not chlorinated; occasional examination; bacteriologically of satisfactory standard; deep wells and also some shallow wells at Bulbourne. Adjoining district also supplied with Company's water.	
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Sewage Disposal	.	Public system for whole district, except outlying hamlets; disposal works on west side of Tring Ford Reservoir. Sewage pumped to high level after having passed through screening and settling tanks, and is treated by broad irrigation; land is under-drained, and effluent runs into a brook running into Tring Ford Reservoir.	
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Refuse Collection and Disposal.		Weekly collection in covered horse-drawn conveyance; partly controlled tipping.	
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Infectious Diseases	.	Cases to Urban District Isolation Hospital; swabs, etc., sent to Clinical Research Association; anti-toxin at office of Sanitary Inspector. Immunization scheme against diphtheria adopted. Steam disinfectors at Isolation Hospital; houses disinfected with formalin lamps.	
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Housing	.	Number of houses erected during 1937	<i>nil</i>
		Number of houses in process of erection	<i>nil</i>
		Number of houses overcrowded as defined by Housing Act, 1936	1

WARE URBAN DISTRICT.

Water Supply .	The supply, which is publicly owned, has always been satisfactory in quality and quantity. There are two deep wells sunk in the chalk; water not chlorinated, quarterly examinations; satisfactory standard. Considerable improvements have been made in recent years by the division of the town into high and low-level zones.
Sewage Disposal .	Practically the whole district is sewered. The sewage gravitates to the pumping station at Stanstead Abbots, in the Ware Rural District. This has been reconstructed and new centrifugal pumps, in duplicate, each of a capacity of 1,000 gallons per minute are installed. From here it is lifted to the sewage farm near Rye House (131 acres) and distributed by broad irrigation. There are 30 houses with cesspools and these are emptied free by the Council. There are still 25 houses with pail closets and one with a chemical closet, and these are also emptied weekly by the Council.
Refuse Collection and Disposal.	Refuse is collected weekly in two covered mechanical conveyances and is disposed of by controlled tipping; land in the valley between the railway and the river is being lifted 5 feet by this means.
Housing . . .	<div>Number of houses erected during 1937 . . . 32</div> <div>Number of houses in process of erection . . . <i>nil</i></div> <div>Number of houses overcrowded as defined by the Housing Act, 1936 23</div>

WATFORD BOROUGH.

Water Supply .	After 1st July, 1938, there will be only two supplies, as Rickmansworth Water Co. supply will be replaced by Watford Corporation. Corporation supply will be sterilised by chloramine process. Colne Valley Co. supply is chlorinated. Chemical and bacteriological reports on Corporation supply have always been uniformly good, including new well at Grove Mill which has recently been sunk. All workers in contact with water supply are given three tests to ascertain whether they are enteric "carriers".
Sewage Disposal .	Public System for whole district. Disposal works at Holywell Farm, and Cassio Bridge Farm, for system of intermittent downward filtration. Garston is now served with the exception of First and Second Avenues. There are cesspools and pail-closets in the added area of Leavesden.
Refuse Collection and Disposal.	Collection once per week in covered mechanical conveyances; in special cases collection once daily; disposal by destructor.
Infectious Diseases .	Cases admitted to Isolation Hospital; swabs now sent to Peace Memorial Hospital; antitoxin kept at Council Offices. Steam disinfectant at Isolation Hospital; houses disinfected by Sanitary Inspectors with formalin and spraying. Isolation Hospital has been enlarged to 100 beds in accordance with the Provisional Scheme of the County Council. Central heating has been installed and an operating theatre provided. Cases are admitted from other districts.

Housing	Number of houses erected during 1937	<i>nil</i>
	Number of houses in process of erection	120
	Number of houses found to be overcrowded as defined by Housing Act, 1936	12

WELWYN GARDEN CITY.

Water Supply	Adequate supply from boreholes in the middle chalk in the Mimram Valley; whole district served except for few houses which have well supplies. Water not chlorinated; three bacteriological examinations during 1937 showed a high standard of purity. A bulk supply is given to the Rural District of Welwyn. The Water Undertaking is owned and operated by the Urban District Council.
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Sewage Disposal	Public system for whole district except the village of Hatfield Hyde and about twenty outlying cottages. Disposal works are situate in the Black Fan Valley, and consist of detritus tanks, screening chambers, sedimentation tanks, and filters. Work on proposed extensions will commence shortly.
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Refuse Collection and Disposal.	Collection once a week in covered motor vehicles and twice weekly from hotels, restaurants, and hospital. Dry refuse disposed of by strictly controlled tipping. Sec. 64 of "The Welwyn Garden City Act, 1932" provides for all dwelling-houses to be provided with a regulation dustbin.
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Infectious Diseases	Cases admitted to the Sisters Hospital, St. Albans. Swabs, etc., sent to the laboratory at Hill End Hospital; antitoxin kept at Cottage Hospital. No steam disinfecter in district; clothing may be sent to Sisters Hospital. Izal is supplied to infected houses; rooms disinfected with formalin candles and vapour.
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Housing	Number of houses erected during 1937	118
	Number of houses in process of erection	<i>nil</i>
	Number of houses overcrowded as defined by Housing Act, 1936	18

Rural Districts.

BARNET.

Water Supply	Adequate supply for greater part of district from Barnet District Gas and Water Co., and Colne Valley Water Co.; water chlorinated and frequently examined. Middlesex Mental Colony supplied from own wells.
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Sewage Disposal	The developed part of district has public system. There are three disposal works at St. Catherine Bourne, Shenley, Tilehouse Farm, Boreham Wood, and Medburn Farm, Elstree. The two former have sedimentation tanks and percolating filters and humus tanks, and the latter has sedimentation tanks and treatment by broad irrigation. A few houses in Borough of Hendon are served by the system.
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Refuse Collection and Disposal	Weekly collection in all the area by covered conveyance. House refuse disposed of by controlled tipping.
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Infectious Diseases .	Cases of infectious disease to Barnet Joint Isolation Hospital; swabs examined at Clinical Research Association. Antitoxin provided as required. Steam disinfectant at Isolation Hospital. Houses disinfected by formalin lamps or spray.	
Housing . . .	Number of houses erected during 1937	50
	Number of houses in process of erection	36
	Number of houses overcrowded as defined by Housing Act, 1936	9
BERKHAMSTED.		
Water Supply .	Considerable part of district served by Great Berkhamsted Waterworks Co., Chiltern Hills Spring Co., and Ashridge Water Co.; water not chlorinated; under consideration; more frequent examinations have been advised; supply also obtained from private wells.	
Sewage Disposal .	Public system for part of district. Cesspools and earth-closets. Long Marston broad irrigation and Wilstone broad irrigation.	
Refuse Collection and Disposal.	Fortnightly collection at Northchurch and Potter End; monthly and two-monthly at other districts. Covered conveyance for Northchurch and Potter End.	
Infectious Diseases .	Cases of infectious disease sent to Aldbury Isolation Hospital. Examination of swabs provided for. Council pays for antitoxin obtained by medical practitioners. Scheme for immunization against diphtheria adopted. No steam disinfectant available; houses disinfected by formalin lamp.	
Housing . . .	Number of houses erected during 1937	6
	Number of houses in process of erection	6
	Number of houses overcrowded as defined by Housing Act, 1936	6
BRAUGHING.		
Water Supply .	Buntingford and Aspenden and Much Hadham have piped supply; water not chlorinated; examinations show a satisfactory standard of purity; parts of High Wych and Albury have also piped supply. Remainder of parishes supplied by shallow wells. The whole district will soon be served by a piped supply.	
Sewage Disposal .	Buntingford, Much Hadham, and parts of High Wych and Braughing and Cottered have public sewers. Remainder of parishes—disposal upon gardens and into ditches.	
Refuse Collection and Disposal.	Buntingford—weekly collection and destruction by burning. Much Hadham—weekly collection, also collected at Braughing and High Wych. Remaining parishes quarterly by collection of indestructible refuse and dumping into pits when weather conditions allow access to the pits.	
Infectious Diseases .	Cases sent to East Herts Isolation Hospitals. Swabs examined at Hill End. Antitoxin kept at Sanitary Inspector's Office, Buntingford. Infected clothing disinfected by steam at Isolation Hospital. Houses disinfected by formaldehyde.	

Housing . .	Number of houses erected during 1937 . .	50
	Number of houses in process of erection . .	---
	Number of houses overcrowded as defined by Housing Act, 1936	22

HATFIELD.

Water Supply . . Public supply for the greater part of the area including Essendon from the mains of the Barnet District Gas and Water Co. The rural areas are served by springs and wells privately owned. Water has been taken to Lemsford and Stanborough.

During 1937, fifteen samples of water were taken from wells and other sources. Of these, eleven were found to be satisfactory and four unsatisfactory. Action is being taken to improve these supplies, particularly in the West End and Rookery districts.

Water supplied by the Barnet District Water Company is chlorinated before delivery to the consumers at North Mimms. There is no chlorination of the Roe Green water supply.

Sewage Disposal . . Public system of sewers for portions of the district ; elsewhere cesspools and pail closets.

Disposal works at : Mill Green, Hatfield, Newgate Street Village, Welham Green, and Cuffley, consisting of settling tanks, bacteria beds, and humus tanks ; and at Littleheath, settling tanks, filter beds, and land treatment.

Little Heath works now used as storm overflow only. Welham Green works completed, having double filtration and chlorination.

Contracts for the drainage of the following areas are in course of preparation : Northaw and Cuffley, Nast Hyde, and Stanborough ; also for the enlargement of the existing sewage disposal works at Hatfield.

Refuse Collection and Disposal. Weekly collection generally ; twice weekly in some parts of Hatfield Town ; covered conveyances always used ; service being extended ; disposal by controlled tipping.

Infectious Diseases . Cases sent by arrangement to East Herts Isolation Hospital ; examination of swabs paid for in necessitous cases ; antitoxin supplied where required ; no steam disinfection ; rooms and clothing are disinfected with formalin.

Housing . .	Number of houses erected during 1937 . .	16
	Number of houses in process of erection . .	20
	Number of houses overcrowded as defined by Housing Act, 1936	42

HEMEL HEMPSTEAD.

Water Supply . . A considerable part of the district has a public supply from various sources, all from the chalk. Water from Council well at Great Gaddesden is chlorinated ; chemical and bacteriological examination of all supplies annually. Outlying portions have private wells and filtered rain-water.

Sewage Disposal .	Water carriage system for portions of the district cesspools, and earth-closets. Disposal works at King's Langley and Markyate by double or single filtration and percolating filters and at Flamstead and Flaunden treatment by discharging on to land.
Refuse Collection and Disposal.	Weekly or fortnightly collection for most of district by mechanical and horse conveyances; disposal by controlled and partly controlled tipping.
Infectious Diseases .	Cases of infectious disease to Hemel Hempstead Isolation Hospital; swabs to Clinical Research Association; antitoxin kept at office of Sanitary Inspector; Immunization Scheme now adopted; disinfectant at Isolation Hospital used when required; house disinfection by sanitary staff.
Housing . . .	Number of houses erected during 1937 . <i>nil</i> Number of houses in process of erection . <i>nil</i> Number of houses overcrowded as defined by Housing Act, 1936 11
HERTFORD.	
Water Supply .	Public supply for practically the whole of the district from tube wells, Aston, Bayford, Letty Green, Welwyn R.D.C., Metropolitan Water Board; quarterly examinations; standard of purity satisfactory, also private supplies and shallow wells.
Sewage Disposal .	Public system for parts of district. At Little Amwell and Aston open tanks, filters, and broad irrigation. At Walkern sedimentation tank and broad irrigation. At Tewin sedimentation tank and sub-irrigation. Open tanks, filters and sprinkler at Little Berkhamsted. In other parts of district cesspools and earth-closets.
Refuse Collection and Disposal.	No collection except at Little Amwell. In the rest of the district tins only are collected by the Parish Councils.
Infectious Diseases .	Cases to East Herts Isolation Hospital; swabs, etc., sent to laboratory at Hill End Hospital; antitoxin kept at Isolation Hospital; steam disinfectant at Isolation Hospital; houses disinfected by formaldehyde.
Housing . . .	Number of houses erected during 1937 . <i>nil</i> Number of houses in process of erection . 17 Number of houses overcrowded as defined by Housing Act, 1936 23
HITCHIN.	
Water Supply .	Of the 33 parishes in this rural district, 17 have now a pipe supply, while work is in hand for the provision of such a supply for 14 other parishes. Water in bulk is taken in some cases from the Hitchin Urban District Council, Stevenage Urban District Council, Hertford Rural District Council and the Knebworth Estates, Ltd. Boreholes have been constructed at Chipping, and an abundant yield of water has been obtained. The erection of the necessary water towers and

laying of mains is in hand, and when completed a supply will be afforded, so far as the Council's district is concerned, to the parishes of Barley, Barkway, Reed, Nuthampstead, Therfield, Kelsall, Sandon, Rushden and Wallington. At King's Walden a bore-hole has been completed, and upon test has proved successful. The mains from this point are in course of construction, and will afford a supply to the parishes of Offley, Lilley, King's Walden, Kimpton and St. Paul's Walden. Water towers are to be constructed at Offley, Whitwell and Tea Green to serve the parishes referred to.

Certain small main extensions have been carried out during the year, namely at Oakhills Estate, Codicote, and Redcoats Green Road, St. Ippollitts. Chlorination is at present carried out at Breachwood Green. Quarterly examinations of all supplies under consideration.

Sewage Disposal . There are public systems for more populous parts of the district:—nine small disposal works. General method adopted is by settling tanks and broad irrigation. The question of making provision for the villages of Ickleford, Breachwood Green, Whitwell, Kimpton and Knebworth in the way of up-to-date installations is under consideration. In this connection the Council are anxious to co-operate with the County in order that they may obtain financial assistance under Section 57 of the Local Government Act, 1929. It is inevitable that with the large extension of water supply services now proceeding, the method of disposal of sewage will require consideration.

Sewers have been extended to serve properties in Bury Lane, Pirton, Heath Lane, Codicote, and Waterdell Lane and London Road, St. Ippollitts.

Refuse Collection and Disposal. This service is under the direction of the Public Health Department. It is carried out by direct labour, with the use of a specially constructed vehicle. There is a weekly collection of house refuse at the parish of Knebworth, and a monthly collection of indestructible refuse from all other premises throughout the area. The refuse is disposed of in eight tips situate in various parts of the district: special attention is given to the control of these tips, and there is little if any cause for any nuisance arising therefrom.

Housing	.	.	Number of houses erected during 1937	.	72
			Number of houses in course of erection	.	48
			Number of houses overcrowded as defined by the Housing Act, 1936	.	52

ST. ALBANS.

Water Supply . . Public supply for greater portion of district from Harpenden Water Co., St. Albans Water Co., Barnet Water Co., Colne Valley Water Co., and public wells. Water from the last three sources is chlorinated.

Sewage Disposal .	Public system for parts of district; public and private cesspools; arrangements can be made for emptying cesspools. Sewage disposal works at Colney Heath, London Colney, and Wheathampstead.
Refuse Collection and Disposal.	Weekly collection in covered mechanical conveyance except in the case of a few isolated properties. Disposal by controlled tipping.
Infectious Diseases .	Cases of infectious disease to St. Albans Hospital; swabs sent to Clinical Research Association and Hill End laboratory; antitoxin supplied at Council's expense; steam disinfectant at St. Albans Hospital; house disinfection by sanitary staff.
Housing . .	Number of houses erected during 1937 . <i>nil</i> Number of houses in process of erection . 46 Number of houses overcrowded as defined by Housing Act, 1936 . . . 41
WARE.	
Water Supply . .	Great Amwell has a piped supply from the Metropolitan Water Board; rest of district served by wells, mostly deep. The district will soon be supplied by a piped supply from the new borehole at Puckeridge, when regular sampling will be carried out.
Sewage Disposal .	Public system for parts of the district; disposal works at Hunsdon and Stanstead Abbots; treatment by broad irrigation.
Refuse Collection and Disposal.	Weekly collection in covered mechanical conveyance; bi-weekly collection of contents of pails; disposal by tipping.
Infectious Diseases .	Cases sent to East Herts Isolation Hospital; swabs to laboratory at Hill End Hospital; steam disinfectant at Isolation Hospital; house disinfection by formaldehyde.
Housing . .	Number of houses erected during 1937 . <i>nil</i> Number of houses in process of erection . 66 Number of houses overcrowded as defined by Housing Act, 1936 . . . 30
WATFORD.	
Water Supply .	Public supply for the whole of the district from Rickmansworth and Uxbridge Valley Water Co., Colne Valley Water Co., Watford Borough, and Heinel Hempstead Borough; few wells in isolated parts (see reports for these districts).
Sewage Disposal .	Public system for more populous parts of district; cesspools and earth-closets. There is a number of sewage disposal works in the district, sewage is also dealt with at works in adjoining districts.
Refuse Collection and Disposal.	Generally weekly collection; in a few areas fortnightly. The parishes of Aldenham and Abbots Langley have their own public cleansing services. The vehicles used throughout the district are satisfactory. Disposal by controlled tipping.

Infectious Diseases .	Cases of infectious disease to Joint Hospital at Watford ; swabs to Clinical Research Association ; antitoxin kept at Council Offices. Steam disinfectant at Isolation Hospital ; house disinfection carried out by Sanitary Inspector.	
Housing . .	Number of houses erected during 1937 .	24
	Number of houses in process of erection .	<i>nil</i>
	Number of houses overcrowded as defined by Housing Act, 1936 . . .	11
WELWYN.		
Water Supply .	Main supply available for practically the whole of the district except Parish of Ayot St. Lawrence and wholly undeveloped portions of other parishes. The supply for the parish of Welwyn is obtained in bulk from Welwyn Garden City Waterworks and is distributed through two water towers and two reservoirs. A small area in the N.W. corner of the parish is supplied with water by Hitchin R.D.C. The parish of Ayot St. Peter and Queen Victoria Memorial Hospital are supplied from Welwyn Waterworks. Private wells supply water in the parish of Ayot St. Lawrence. During 1937, seven samples of water were examined. Of these three were found to be unsatisfactory, and action is being taken in regard to these. Examinations of the public supplies to the district showed a high standard of purity. No chlorination is carried out.	
Sewage Disposal .	There are public sewers and a disposal works in Welwyn and these serve the area around the older portion of the town including all the housing schemes at Welwyn. There are sewers and a disposal works at Woolmer Green. Other areas in this district are drained mainly to cesspools and septic tanks. Earth closets remain only in the oldest cottages, principally in the parishes of Ayot St. Peter and Ayot St. Lawrence.	
Refuse Collection and Disposal.	Weekly collection throughout the district. Covered mechanically propelled vehicle is used. Disposal by carefully controlled tipping.	
Infectious Diseases .	The Council is one of the contributing Authorities to the North Herts Joint Hospitals Board, and cases of Infectious Diseases are sent to the Board's Isolation Hospital at Letchworth. Swabs are sent to the Hill End Hospital Laboratory : Antitoxins are kept at the Welwyn Hospital. There is no steam disinfectant in Welwyn, but occasionally articles are sent to the Isolation Hospital for disinfection. Houses are disinfected by spraying with Izal and fumigation with formalin. Izal disinfectant is supplied as necessary.	
Housing . .	Number of houses erected during 1937 .	<i>nil</i>
	Number of houses in process of erection .	<i>nil</i>
	Number of houses overcrowded as defined by Housing Act, 1936 . . .	5

DISPOSAL OF HOUSE-REFUSE : DUMPS.

There is little new to report in connection with the methods adopted for the disposal of refuse in the County. The method of controlled tipping which is now adopted in many districts is efficiently carried out although routine inspection is necessary to prevent any laxity in carrying out the conditions necessary to prevent nuisance or the disturbance of amenities.

The following report submitted by Mr. Dubbin, who supervises the manner in which the disposal of refuse is carried out in the County, gives information as to the number and condition of refuse dumps in the County :—

“ Continuous inspections of all the Local Authorities’ and other refuse dumps throughout the County have been maintained.

“ The conditions of the Local Authorities’ refuse disposal works is generally improving, and owing to the co-operation of the officers in charge of these works any suggestions regarding tipping control, rat destruction, etc., are readily considered and usually agreed to.

“ There are 49 dumps, of which records are kept, and they are graded as follows : 23 graded A, under systematic control ; 22 graded B, partly controlled ; 4 graded C, no control—this includes 3 small local dumps ; 2 incinerator and salvage plants.

“ The condition of Messrs. Inns & Co.’s dumps at Cole Green and Wheathampstead, on which the refuse from Finsbury, Islington and Stoke Newington is deposited, is very good, and all reasonable precautions are taken to prevent any nuisance.

“ Owing to the increasing difficulty experienced by contractors and others outside the County boundaries to find suitable sites for disposing of refuse such as old building material, spoil from Tube Railway extensions, sewers, etc., constant observation has to be kept under the terms of the County Council Act, 1935, to prevent unauthorized dumping in the County. A number of these cases have already been dealt with.

“ It is very satisfactory to note the number of instances where waste sites, boggy land, etc., has been converted to a useful purpose by being made into recreation grounds, playing fields, etc., after being reclaimed by controlled dumping.”

MILK PRODUCTION : NEW ORDER.

With the coming into operation of new orders the Milk (Special Designations) Amendment Order, 1938, and the Milk and Dairies Amendment Order, 1938, the position in regard to the supervision of the production of designated milk has been

altered. The duties in regard to the clinical examination of cattle and the application of tuberculin tests are now carried out by special inspectors appointed by the Ministry of Agriculture and Fisheries. The duties relating to the granting of licences for the production of designated milk and for the collecting of samples of milk for initial and periodical examinations will continue to be carried out by the County Council.

The standard to which graded milks have to conform is laid down in the Order. The procedure adopted in the County is that all samples of milk are examined for bacterial count, coliform bacilli, and by the methylene blue test. In comparing the results obtained it was found that usually during the winter months there was a correlation between a high bacterial count and a positive methylene blue reaction but this is not so obvious during warmer weather.

The following are the results of the examination of samples of milk made at the County Laboratory at Hill End Hospital during the year :—

Number of samples of milk examined by microscopy for tubercle bacilli	198
Number of these samples found positive	11
Number of bulk samples examined for tubercle bacilli	28
Number of these samples found positive	0
Number of single samples examined for tubercle bacilli	80
Number of these samples found positive	10
Number of undefined or presumably suspected samples examined for tubercle bacilli	3
Number of these samples found positive	1
Number of samples tested with biological test for tubercle bacilli	60
Number of these samples found positive	9
Number of samples examined for tubercle bacilli which were samples of school milk	87
Number of these samples found positive	0
Number of samples of designated milk examined	1,453
Number of samples of designated milk up to standard	1,107
Number of samples of designated milk below standard	346

The following figures indicate the action which has been taken during the year under the Milk and Dairies (Consolidation) Act, 1915: Number of animals examined, 46,160; number found to be suffering from tuberculosis, 27; number of samples examined, 160.

SALE OF FOOD AND DRUGS ACTS.

The work under the Sale of Food and Drugs Acts is carried out by the Inspectors appointed for the purpose, working under the Chief Constable. Analysis of samples taken are made by the County Analyst, Dr. Bernard Dyer, of the Analytical

Laboratory, 17 Great Tower Street, London, E.C., to whom I am indebted for the following report regarding the analytical work carried out during the year.

DR. DYER'S REPORT.

Food and Drugs (Adulteration) Act, 1928.

SUMMARY OF SAMPLES ANALYSED FROM 1ST JANUARY, 1937, TO
31ST DECEMBER, 1937.

	<i>Samples Analysed.</i>	<i>Samples Unsatisfactory.</i>
Milk	476	47
Milk, condensed	2	—
Cream	19	—
Cheese	1	—
Butter	38	1
Margarine	3	—
Lard	23	2
Lard substitute	1	—
Suet, shredded	1	—
Beef, Ham and Egg	5	1
Beef Loaf	1	—
Bloater Paste	2	—
Chicken and Ham Paste	1	—
Fish Paste	1	—
Meat Pie	1	—
Pork Pie	1	—
Salmon and Shrimp Paste	2	—
Sausages	12	1
Sausages, Preserved	2	—
Veal, Ham and Egg Pie	1	—
Peas, Tinned	1	—
Soup, Tomato	1	—
Chocolate (milk)	1	—
Chocolate Iced Cake	1	—
Chocolate Slices	1	—
Fruit Cake	1	—
Cocoa	9	—
Coffee	11	—
Coffee with Chicory	4	—
Black Currant Cordial	1	—
Ginger Wine (non-alcoholic)	2	—
Lemonade Powder	1	—
Lemon Barley Powder	1	—
Lemon Barley Water	2	—
Lemon Squash	3	—
Lime Juice Cordial	2	—
Orange Crush	1	—
Orange Squash	1	—
Raisin Wine (non-alcoholic)	1	—
Raspberry Squash	1	—
Golden Syrup	1	—
Honey	2	—
Jam	7	—
Lemon Cheese	1	—
Lemon Curd	1	—

	<i>Samples Analysed.</i>	<i>Samples Unsatisfactory.</i>
Jelly	3	—
Almonds, Ground	16	—
Arrowroot	1	—
Baking Powder	2	—
Bicarbonate of Soda	3	—
Cream of Tartar	1	—
Custard Powder	1	—
Flour	1	—
Flour, Self-raising	4	—
Rice, Ground	4	—
Sponge Pudding Mixture	1	—
Sugar	3	—
Horseradish Cream	2	—
Mint Sauce	1	—
Mustard Mixture	1	—
Mustard, Preserved	2	—
Olive Oil	3	—
Pepper	12	1
Pickles	2	—
Sauce	2	—
Spice, Mixed	1	—
Salad Cream	1	—
Vinegar	9	1
Cherries, Glace	1	—
Currants	1	—
Fruit Salad, Dried	1	—
Mincemeat	4	—
Peel, Candied	2	—
Raisins	1	—
Sultanas	2	—
Beer	1	—
Rum	1	—
Whisky	4	—
Aspirin Tablets	1	—
Boracic Crystals	1	—
Paraffin, Medicinal	1	—
Tincture of Iodine	1	—
Vaseline	1	—
Zinc Ointment	2	—
“Appeal to Cow” milk samples	32	—
Total	<u>784</u>	<u>54</u>

Of the 47 samples of unsatisfactory milk, 24 were unsatisfactory by reason of deficiency in fat, the shortages ranging from 3 per cent up to 28 per cent of the minimum quantity of fat proper to normal milk as indicated in the Sale of Milk Regulations. The other 21 samples were found to contain added water in quantities ranging from 1 per cent up to 20 per cent.

In some of the samples of milk in which a very small addition only of water was indicated the presence of added water was conclusively indicated by the freezing point of the milk apart from the ordinary analysis.

Of the 32 samples of milk taken on "appeal to cow" in connection with samples that were found to be unsatisfactory, only one showed any deficiency in non-fatty solids, and this sample had the freezing point of genuine milk. Fifteen of the "appeal to cow" samples, however, showed natural deficiencies in fat.

One sample of butter contained an excessive quantity of water, namely 18.3 per cent, being 2.3 per cent above the maximum quantity of 16 per cent allowed by the regulations of the Ministry of Agriculture. Two samples purchased as "lard" were found to consist of lard substitutes.

A sample of shredded suet was found to contain 2 per cent of rice flour beyond the recognized maximum quantity needed to keep shredded suet in a satisfactory condition.

One sample of sausages was found to contain sulphur dioxide without notice of preservative having been given to the purchaser.

One sample of pepper was found to be mixed with carbonate of magnesia to the extent of $2\frac{1}{2}$ per cent. One sample of vinegar, sold as such without any descriptive prefix, was found to consist of artificial vinegar, but was of the full acid strength of genuine vinegar.

All of the other samples dealt with were satisfactory.

SUMMARY AND CONCLUSIONS.

The health of the County during 1937 has generally been satisfactory apart from an epidemic of influenza during the early part of the year.

The estimated population of the County is given as 474,700 compared with 460,150 for 1936; this represents an increase of 14,550 compared with 18,450 last year.

There has been an increase in the birth-rate, which was 14.6 compared with 14.4 last year. The actual number of births was 6,957 compared with 6,665 in the previous year.

A slight rise has occurred in the death-rate which was 10.1 compared with 10.0 in 1936, the causes of this increase are discussed in the body of the report.

The infant mortality was 37, the same as last year. There has been a fall in the infant mortality in the urban districts but a rise in the rural districts. The figure of 37 for the infant mortality compares favourably with that of 58 for England and Wales.

A slight increase has occurred in the maternal mortality which was 2.4 compared with 2.1 last year. The rate for England

and Wales being 3.11. In 2,109 maternity cases attended in their own homes by midwives there were two maternal deaths, giving a maternal mortality of 1.0 per 1,000.

There has been a further decrease in the death-rate from pulmonary tuberculosis, namely 0.38 compared with 0.42. This is the first occasion on which the death-rate from this disease has been below 0.4 per 1,000, the previous lowest rate being 0.42 per 1,000. The death-rate from non-pulmonary tuberculosis has also declined, being 0.07 compared with 0.10 last year.

The death-rate from cancer and other forms of malignant disease has slightly increased, being 1.5 compared with 1.4 for 1936.

The number of patients from the County attending the Venereal Disease Clinics in London during the year has been 334 compared with 332 for 1936.

The death-rate from epidemic disease has decreased, the rate being 0.06 compared with 0.10 last year.

There was an increase in the number of deaths from measles, scarlet fever, bronchitis, influenza, and cerebral hæmorrhage, the two latter diseases being responsible for an increase in the number of deaths of 137 and 46 respectively.

The number of deaths from violence (including accidents but excluding suicide) was 184.

In conclusion I desire once more to take the opportunity of expressing thanks on behalf of the County Council to those ladies who act as Voluntary Helpers at the various centres and clinics in the County. The increase in the number of centres in the County makes an increasing demand upon the services of voluntary workers whose help and assistance are greatly appreciated. I must also express again my thanks to the nurses in the County for their loyalty and help at all times and for their unfailing devotion to duty.

